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JOURNAL

OF THE

AMERICAN ORIENTAL SOCIETY

EDITED BY

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PROCEEDINGS
OF THE
AMERICAN ORIENTAL SOCIETY
AT THE MEETING IN BOSTON, MASS., 1917

The annual meeting of the Society, being the hundred twenty-ninth regular meeting since its establishment, was held in Boston, Mass., in the House of the American Academy of Arts and Sciences, 28 Newbury Street, on Tuesday and Wednesday of Easter Week, April 10th and 11th, 1917.

The following members were present at one or more of the sessions:

Abbott	DeLong	Jastrow	Ogden, Miss
Abbott, Mrs.	Edgerton	Jewett	Sanders
Albright	Ellis	Kelner	Schmidt
Arnold	Fallerton	Kyle	Schoff
Barret	Gavin	Lauman	Steele
Barton	Gellot	Magoun	Tedesko
Bates, Mrs.	Gottheil	Martin	Torrey
Breasted	Grant	Montgomery	Vaschalis
Burnage	Gray	Moore, G. P.	Warren
Cadbury	Gray, Mrs.	Moore, Mrs. G. P.	Warren
Carnoy	Haas	Morgenstern	Westermayr
Chester	Hanchett, Mrs.	Muss-Arnolt	Winslow
Clay	Haupt	Nies, J. B.	Wolfeon
Coomaraswamy	Hopkins	Ogden	Worrell
Crandon	Hussey, Miss		

[Total: 58]

The first session was held on Tuesday morning, beginning at 11:15 a. m., the President, Professor Barton, being in the chair.

The reading of the Proceedings of the meeting in Washington, April 24th, 25th, and 26th, 1916, was dispensed with, as they had been published in the JOURNAL (36, 428-443). There being no corrections, they were approved as printed.

The Committee of Arrangements presented its report, thru Professor Lanman, in the form of a printed program. The succeeding sessions were appointed for Tuesday afternoon at two, Wednesday morning at half past nine, Wednesday afternoon at two. A fifth session, if it should be found desirable to hold one, was appointed for Thursday morning at half past nine. It was announced that there would be an informal gathering of the members on Tuesday evening in the Reading Room of the House of the American Academy; that the session on Wednesday morning would be devoted to papers dealing with the historical study of religion and to those of a more general character; that the members of the Society were invited to be the guests of the local members at luncheon—the ladies at the College Club, the men at the Harvard Club—on Wednesday at one o'clock; that the annual dinner, at which the local members would entertain the visiting members, would take place at the Hotel Brunswick on Wednesday evening at half past seven; and that a committee of local members would be glad to show visitors over the Widener Library of Harvard University, the Semitic Museum, the University Museum, and other points of interest in Cambridge, at the close of the meeting.

It was voted to send a telegram of greeting to the Society's oldest member, Professor Basil L. Gildersleeve, and likewise to Professor Crawford H. Toy.

REPORT OF THE CORRESPONDING SECRETARY

The Corresponding Secretary, Professor Franklin Edgerton, presented the following report:

On account of the continuance of the war in Europe, the international correspondence of the Society continues to be at a low ebb, and the Secretary's duties during the past year have been concerned mainly with our internal and domestic affairs.

This year has been marked by one event of prime importance in the history of our Society—the formation of a Middle West Branch. At last year's meeting the Directors appointed a committee, consisting of Professors Breasted, Olmstead, Morgenstern, and Clay, to consider the founding of such a branch. This committee called a meeting of Orientalists of the Middle West, to convene at Chicago on January 27th, 1917. An excellent program was arranged and successfully carried out. An account of the proceedings has been published in the JOURNAL (36, 423-425). The attendance at the meeting, the interest shown, and the number of new members pledged to our Society have already justified the formation of this branch,

which will, I believe, be of the greatest benefit to the work of the Society as a whole.

The program of the meetings this year has been arranged according to the plan adopted last year, which seemed to prove successful and satisfactory. In order to facilitate and encourage general discussion, the authors of the papers to be presented were asked this year to submit in advance brief abstracts of their communications, these abstracts to be sent to all members indicating their intention to be present. The same abstracts have also been sent to the press of Boston, in the hope of calling attention to the work of the Society by facilitating the publication of accurate newspaper reports.

Death has been unusually severe on the membership of the Society during the past twelve months. It has deprived us of twelve members, nine active and three honorary, some of them of great distinction in the field of Oriental studies and active in the work of our Society.

AUGUSTE BARTH, easily the dean of French Indologists, died at Paris on the 15th of April, 1916, in his 83d year. He had been an honorary member of the Society since 1898. He was also an honorary member of the British Royal Asiatic Society, a corresponding member of the Imperial Russian Academy of Sciences, a member of the Académie des Inscriptions et Belles Lettres, and a member of numerous other learned societies. M. Barth never held any academic post, and indeed had little academic training; he was a self-made scholar. His *Religions de l'Inde* (Paris, 1879) was not only the first work of its kind chronologically, but was remarkable in other respects. Few books have ever been written on so large a field which were so thoroughly original, and few books so original have been at the same time so lucid, so sane, and so comprehensive. It is these characteristics that have combined to make the book one of prime value even to this day. And these are the characteristics of all of Barth's later work, which has consisted mostly of critiques and reviews, sometimes dealing with single publications, sometimes summing up the general progress of knowledge on a more or less wide field. It may fairly be said that many of Barth's brief articles have been worth more than stout books, and that many of his reviews have been more valuable than the works which occasioned them.

JAMES BRUNTON, C.I.E., LL.D., who had been an honorary member of this Society since 1909, died at his home in Edinburgh on Oct. 3d, 1916, at the age of 84. Because of the fact that he established both the *Indian Antiquary* (in 1872) and the *Epigraphia Indica* (first volume published in 1892) and because of his numerous monumental publications he may rightfully be designated as in large measure the founder of the modern science of Indian archeology and epigraphy. He became head of the Archaeological Survey of Western India in 1872, of the Archaeological Survey of Southern India in 1881, and of the united Archaeological Surveys of India in 1886. Among his most important works are: *The Caves Temples of India* (with J. Ferguson, 1880); *Buddhist Caves and their Inscriptions* (1883); and *Caves Temples of Ellora* (1887).

Professor Sir GASTON MASPERO died on June 30th, 1916, at the age of 70. By his death our Society lost one of its most eminent honorary mem-

ters (he was elected in 1893) and the world one of its most distinguished scholars. His life was marked by extraordinary activity and usefulness and was crowned with almost every honor that a man of learning and merit, from the time when he was made Professor of Egyptology in the Ecole des Hautes Etudes at the age of twenty-three, and in the Collège de France at the age of twenty-seven, to the year 1909, when he received the distinction (rare for a foreigner) of an English knighthood in recognition of his achievements as Director of the Service of Antiquities in Egypt. The value of his contributions to Egyptology is held to be enormous. He was, moreover, one of that never too common type of scholars who know how to combine scientific industry and accuracy with lucid and skilful popular presentation. His *Ancient History of the Peoples of the Classical Orient* has made those early times alive and real for those who can not follow his scientific investigations.

We all feel not only professionally but also personally the deepest sense of bereavement in the loss of Dr. WILLIAM HENRY WARD, whose long life of usefulness ended on August 25th, 1916. He was one of our oldest members, having joined the Society in 1869; and for many years he was one of the leaders in the Society's work. He was President from 1890 to 1894 and again in 1909-1910. No few sentences can adequately express what Dr. Ward has been to our Society. Rather than attempt such a task, I refer to Professor Jastrow's able memorial sketch recently printed in the JOURNAL (36, 233-241).

Another of our most active and distinguished members, the Rev. Dr. FRANCIS BROWN, died in New York on October 15th, 1916. He had been connected since 1870 with Union Theological Seminary, where he became Professor of Hebrew and Cognate Languages in 1890 and President in 1908. He was not only one of the most noted theologians of the country, but also an eminent Orientalist and productive scholar, especially in the field of Hebrew lexicography. He was actively interested in the work of the Society, of which he had been a loyal and devoted member since 1881.

Oriental studies generally and Egyptological researches in particular have lost a generous supporter in Mr. ECKLEY BAINBRIDGE COXE, Jr., of Philadelphia, who died on September 20th, 1916. Though not a scholar by training, he took an active and intelligent interest in the antiquities of Egypt from an early period of his life, and repeatedly visited that country. Later he fitted out two expeditions to Nubia and Egypt, which were conducted by the University of Pennsylvania Museum, in 1907 and again in 1915. The latter expedition was still engaged in fruitful research at the time of its patron's death. Mr. Coxe was president of the Board of Managers of the Museum of the University of Pennsylvania, and was a life member of our Society, which he joined in 1913.

Professor LEVI H. ELLIOTT, a member of the Society since 1883, died on December 27th, 1916. He had been on the staff of Amherst College since 1877, as instructor and professor in the departments of Latin and Greek. His claim to distinction as an Orientalist rests on the fact that he prepared the first Pāli book ever issued in America—the *Nice Jātakas* (1889), a most convenient little volume, which has been useful to many a

student beginning the study of Pali. Among his avocations were botany and genealogy, on both of which subjects he wrote many minor articles and some books.

Professor HENRY FRASERSON, who became a member of the Society in 1876, died at his home in Hartford, Conn., on March 30th, 1917, in his 70th year. He was a man of varied interests and manifold activities—a clergyman of the Episcopal Church, a professor of History and Political Science, an educator (he was for some years head of St. Paul's School at Concord, N. H.), and an author of books and monographs on historical subjects.

Dean SAMUEL HART, D.D., D.C.L., LL.D., died February 25th, 1917. He, too, had a wide range of interests, and he attained marked distinction in several fields. For many years he was professor—first of Mathematics, then of Latin—in Trinity College. He became professor and vice-dean in Berkeley Divinity School, Middletown, Conn., in 1899, and dean in 1908. This last position he held at the time of his death. He was also secretary of the House of Bishops of his Church since 1886; president of the Connecticut Historical Society since 1900; and a senator of Phi Beta Kappa since 1892. He was a classicist of distinction; edited the *Satires* of Persius and of Juvenal; and was at one time secretary and later president (1892) of the American Philological Association. He was also actively interested in Oriental, especially Hebrew, studies, and edited the Mozarabic Liturgy. He was a member of the Society since 1879.

The Rev. HUGO W. HOFFMANN, Ph.D., for twenty-two years pastor of St. Paul's Evangelical Lutheran Church, Brooklyn, N. Y., died very suddenly on February 3d, 1917. He was formerly a student of Semitic languages at New York University, under Professor Prince, and had been a member of the Society since 1899.

Professor PERCIVAL LOWELL, the celebrated astronomer, died on November 13th, 1916, at Flagstaff, Arizona. His scientific and scholarly activities were confined to the field of astronomy, in which he was not only an able scholar but also a brilliant popularizer. But his active interest in the Orient is attested by his authorship of such books as *The Soul of the Far East*, *Oriental Japan*, etc., as well as by his membership in our Society (since 1893) and in the Royal Asiatic Society.

The Rev. HERETE BOARDMAN VANDERBROOK, a member of the Society since 1911, died on January 30th, 1917. He was a graduate of Trinity College (1903), and had been a member of the faculty of Berkeley Divinity School, Middletown, Conn., since 1910.

In concluding this report the Corresponding Secretary desires to express his very grateful appreciation of the cordial and helpful co-operation accorded him by his fellow members and especially by the Recording Secretary, Dr. Haas.

Tribute was paid to some of the members whose death was reported: Professor Hopkins spoke on M. Barth and Mr. Burgess; Professor Lanman made appreciative remarks concern-

ing Professor Hart, Professor Elwell, Mr. Burgess, and M. Barth; Professor Jastrow spoke on Mr. Coxe; Professors Gottschell and Barton and Mr. Steele referred to the character and achievements of President Brown.

Professor Lammān then read a letter from Ceylon regarding the publication of commentaries on the Buddhist Tripitaka and their gratuitous distribution to libraries in this country.

REPORT OF THE TREASURER

The Treasurer, Professor Albert T. Clay, presented the following report:

RECEIPTS AND EXPENDITURES FOR THE YEAR ENDING DEC. 31, 1916

Excise

Expenditures

In addition to the balance of \$4079.23 deposited with Yale University, the Treasurer of that institution holds the following bonds for the Treasurer of the Society:

2 Lackawanna Steel Company	\$2000
1 Minneapolis General Electric Company	1000
1 Virginian Railway Company	1000
2 Chicago, Rock Island & Pacific Railway	2000

At the last meeting the Treasurer requested the permission of the Society to make a readjustment of the funds, so as to create a Life Membership Fund and to re-establish a fund to be known as the Whitney Fund. He also asked for permission to fix a stated sum as principal for the Bradley and Cotheal Funds, so that the interest accruing could be used for publication and other purposes. The Directors authorized him, provided there be no legal obstacles, to use the surplus of all funds above the original amount, and the interest annually accruing thereon, for the re-establishment of such funds as may have been allowed to lapse, and for the publication of the Journal and other works.

Subsequently, in examining the minutes of the Society, the Treasurer found that practically everything that he had asked permission to do had years ago been ordered by the Society.

The minutes for May, 1890, state that 'the Treasurer reported a gift from Mr. A. I. Cotheal of New York, one of the oldest members of the Society, and long a director, of one thousand dollars intended by the donor as a nucleus of a Publication Fund and prescribed by him to be invested that its interest may be used to help in defraying the cost of the Journal and Proceedings' (*PAOS* 15. ii).

Two years later we find it recorded that 'the Treasurer further received, April 4, 1892, from an anonymous giver, the sum of one thousand dollars (not included in the foregoing statement) to be added to the Society's Publication Fund; the principal of said sum to be left intact, and its interest to be used towards defraying the Society's expenses of publication. The gift was made as "a help to the Society" and in the hope that the gift—along with the gift of the like sum from Mr. Cotheal—might serve as a "suggestion and encouragement to others to do likewise"' (*PAOS* 15. cxiii). The Treasurer wishes to add that the anonymous benefactor was the late William Dwight Whitney.

In April, 1892, it was voted 'that henceforth the fees received in composition for annual assessments to constitute Life Members be treated by the Treasurer as part of the Capital Fund of the Society' (*PAOS* 15. cxiii).

In going back to the minutes of May, 1865, nearly thirty years earlier, shortly after the death of the Hon. Charles W. Bradley, LL.D., of New Haven, we find it recorded that his donations to the Society's collections of books and MSS. had been vastly greater than those of any other person, and that, by means of personal solicitation he had brought to the treasury more than a thousand dollars, a part of it for the specific object of the purchase of a font of Chinese type (*PAOS* 8. lxii).

After careful consideration of all matters connected with these foundations and the present financial status of the Society, the Treasurer wishes to present the following list of capitalized funds, the interest of which can be used for publication purposes, at the same time expressing the hope that the reports of Treasurers in future will annually record them for the benefit of the members, as a 'suggestion and encouragement to others to do likewise.'

CAPITALIZED FUNDS

Charles W. Bradley Fund	\$3000
Alexander L. Cothesal Fund	1500
William Dwight Whitney Fund	1000
Life Membership Fund	2075
	<hr/>
	\$7575

REPORT OF THE AUDITING COMMITTEE

We hereby certify that we have examined the account of the Treasurer of the Society, and have found the same correct, and that the foregoing account is in conformity therewith. We have also compared the entries with the vouchers and the account book as held for the Society by the Treasurer of Yale University, and have found all correct.

P. W. WILLIAMS
CHARLES C. TOWERY } *Auditors*

New Haven, Conn., April 4, 1917.

It was voted to postpone consideration of the remaining items of business to the next business session on Wednesday afternoon. The President then delivered the annual address, the subject being 'Ancient Babylonian Expressions of the Religious Spirit.'

In view of the length of the morning session it was decided to reconvene at 2:30 p. m. instead of at 2 p. m. Thereupon, at 1:15 p. m., the Society took a recess until the time set.

SECOND SESSION

The second session began at 2:36 p. m., with the President in the chair. According to the fixt program prepared by the Corresponding Secretary, the Society proceeded at once to the hearing of communications, in the following order:

Professor E. GRANT, of Smith College: Smith College tablets of the period of the First Babylonian Dynasty.

Nearly a score of tablets from the collection at Smith College, presented in facsimile, transliteration, and translation. They comprise court agreements, sales, loans, leases, receipts, and lists from the reigns of Samsuliuma, Abi-ekhu, Ammiditana, etc. One especially interesting tablet is a legal document concerning the family status of a sacred woman of the god Ramman.

Professor A. V. W. JACKSON, of Columbia University: Added etymological notes on the Old Persian Inscriptions. (Presented in brief abstract by the Corresponding Secretary.)

(1) Etymological support of the interpretation of OP. *am'ata* as a verbal form, meaning 'be fed.' (2) A possible additional item

of testimony from the Baluchi that the adjective OP. *śudhāyāś* means 'by a natural death.' (3) Brief etymological comments on some other OP. words.

Professor L. C. BARBER, of Trinity College: Hindu sculpture and architecture.

If the conclusions of the modern psychology of beauty be accepted, there appear reasons why later Hindu sculpture falls far short of high attainment: the effort to portray the spiritual by violating the laws of matter and by misrepresenting its organized forms is an illogical proceeding, as might be expected from artists who handled a material whose very existence was held to be an illusion. The aim of architecture seems to hold it back from the greatest faults of Hindu sculpture.

Professor J. H. REASTERD, of the University of Chicago: The earliest boats on the Nile. (Illustrated with photographic projections.)—Remarks by Mr. Schaff and Dr. Niss.

Professor E. W. HORNKE, of Yale University: India and Indian religious parallels. [Printed in the JOURNAL, 37, 73-84.]—Remarks by Professors Carnoy and Jastrow.

Dr. J. B. Niss, of Brooklyn, N. Y.: Is *Ummāš* the correct reading for the ideogram *Gīš-Ūgīš*?—Remarks by Professor Clay.

The author has in his collection a tablet in which the city Ummāš is mentioned written not *Gīš-Ūgīš* as usual, but *Ummāš*. This does not prove that the latter is the same as the former, but it points in that direction, and it does prove that there was a city named Ummāš in Babylonia.

Professor K. FULLERON, of the Oberlin School of Theology: Does Isaiah teach the inviolability of Jerusalem at Is. 10, 5-15?—Remarks by Professor Arnold.

The chief problem of anti-Assyrian prophecies is whether Isaiah taught the inviolability of Zion. Is. 10, 5-15 is the key to these prophecies. Vs. 13-15 and vs. 5-7a indicate a contrast between Jahweh's and Assyria's theories of Assyria's conquests. Jahweh's theory: Assyria is his instrument of punishment; Assyria's theory: Assyria conquers in its own power. Vs. 7b-12 indicate a contrast between Jahweh's and Assyria's plans. Jahweh's plan: chastisement, Jerusalem to be ultimately saved; Assyria's plan: destruction. Vs. 7b-12 in their present form are secondary. Conclusion: Isaiah does not teach the inviolability of Jerusalem.

Professor J. A. MONTGOMERY, of the University of Pennsylvania: A Christian incantation bowl in the 'Manichaean' script.

An example of a well-known class of charms from Babylonia, written on the inside of clay bowls, in an Aramaic dialect. This case is unique, as the charm includes, along with the invocation of pagan and Jewish deities and angels, also the Trinitarian formula.

Professor C. C. TUNNEY, of Yale University: Three passages from the Koran: 1. The *ashabat al-bein* (5, 105). 2. 'The dog *Raqīm*' (18, 8, 17). 3. An emendation of the text (64, 14).

The Corresponding Secretary then presented in abstract papers submitted by members unable to be present at the sessions, in the following order:

Dr. F. R. BLAKE and Dr. A. EMBER, of Johns Hopkins University: A new Hebrew Grammar.

The authors have felt the need of a practical Hebrew grammar, and the present work is an attempt to supply that want. It is believed that the combined labors of two scholars, one especially interested in linguistic science and one with a native command of Hebrew, will produce a work better adapted to the needs of students than any yet published.

The grammar will consist of two volumes, the first containing all the most essential facts, and the second enlarging on and supplementing the first. The chief features of the work will be: scientific accuracy, practical arrangement, simplification of difficult points, conversation, chrestomathy.

Dr. F. R. BLAKE, of Johns Hopkins University: (a) The etymology of the Semitic particle *ka*, 'like'; (b) The compound particle *ki-im* in Hebrew.—Remarks by Professor Haupt.

(a) The Semitic particle *ka* is supposed by many to be a noun meaning 'likeness' standing in the construct state before a genitive. It seems, however, to be identical with the demonstrative element *k* which occurs in many demonstrative pronouns, e. g. Arabic *dhalika*, Aramaic *dek*, Ethiopic *zku*, etc. That such is the case seems to be shown by the fact that comparative particles meaning 'as, so,' in other languages are often derived from pronominal elements; e. g. English *so* and *as* (originally *el-so*) are connected with the Indo-European pronominal root *sw* (Skt. *sw*, Lat. *sus*, 'his, her'), etc.

(b) The compound particle *ki-im* has a variety of meanings depending on the various meanings of *ki* and *im*. Its most important meaning is 'but' after a negative, German *sondern*. In this meaning it referred originally to what preceded, the adversative idea referring to what follows being developed as the result of the collocation. In such a sentence in Hebrew as 'the horse is not white but black' the original meaning was either 'the horse is not white, if not (so, then) black' or '... not white, verily not, (it is) black.' Both conceptions are supported by parallels in other languages.

Professor E. W. FAY, of the University of Texas: Indo-Iranian direction adjectives.

Notes on the etymology of several such adjectives: *ji-h-má*, *pesterius*, *âsâ*, etc.

Dr. B. LAUREN, of the Field Museum of Natural History: The vigesimal and decimal systems in the Ainu numerals, and some remarks on Ainu phonology.

In the first part of this paper an analysis is given of the numerals common to the three principal dialects of Ainu, those of Yezo, Sag-

halin, and Kuril. This system is thoroly vigesimal, the number 5 being express by the word for 'hand' and the highest unit being 20. Years ago the writer found in the southeastern part of Saghalin also a decimal system of counting, hitherto unknown. It is shown that this progress was made under the influence of the Manchu, who establish some kind of suzerainty over Saghalin in the 18th century. The second part of the investigation is devoted to a discussion of the phonetics of the Ainu speech with special reference to the Saghalin dialect, the writer comparing his own data and conclusions with the observations recently made by a Polish scholar, Pil'sudski, and Abbé Rousselot. An attempt is made at reconstructing the ancient consonantal system of the language, which bears no resemblance to any language with which Ainu has erroneously been compared, that is, Altaic, Indo-European, Semitic, or Basque. Ainu is at present an isolated language, its congeners, if they ever existed, being extinct long ago.

Dr. I. M. CARINOWICZ, of the U. S. National Museum: Jewish amulets in the United States National Museum. [Printed in the JOURNAL, 37. 43-56.]

Dr. MOSES SEIDEL, of Johns Hopkins University: *C* as an old plural ending of the Hebrew noun.

The schedule of papers for the session being thus completed, the Society proceeded to the consideration of items of business not taken up at the morning session.

REPORT OF THE LIBRARIAN

The Librarian, Professor Albert T. Clay, presented the following report:

The work of cataloguing the Library, which was made possible by generous gifts from Professor J. B. Jewett and appropriations from the Society's treasury, is now practically completed. Besides the regular catalog, there has been prepared a shelf-list, which will be used in the printing of the catalog for distribution to the members.

Professor Torrey has very kindly rendered valuable services in connection with the Turkish books in Arabic characters, as well as the Turkish and Arabic manuscripts; and Professor Hopkins has been helpful in the listing of the Sanskrit works. The Librarian wishes to express here his gratitude to these scholars. The books in Chinese and Japanese have been classified by students acquainted with these languages. There remain about 50 Arabic books and 50 Turkish books in Armenian characters, which the Librarian hopes to see catalogued without delay.

It is hoped that the printed list may be in the hands of the members before the next meeting. The cost of publishing it, estimated to be between five and six hundred dollars, will be covered, if at all possible.

without recourse to the funds of the Society. A gift of \$100 for this purpose has been received from Mrs. James B. Nies; other gifts that the Librarian hoped to be able to announce have not yet materialized.

The Librarian takes this occasion to repeat that he is ready to lend the books of the Society to the members. In this way the Library can be of service especially to those far removed from the large libraries of the land.

The following is a list of the principal accessions during the past year:

The Dinkard, ed. by Darub Dashtir Peshastan Sanjana, vol. 15.

An Expression of the Law of the Avesta, by Lawrence H. Mills.

A List of Personal Names from the Temple School of Nippur, by Edward Chiera.

Public Administration in Ancient India, by Pramathanath Banerjea.

South Indian Images of Gods and Goddesses, by H. Krishna Sastri.

Architecture and Sculpture in Mysore, no. 1, by R. Narasimhachar.

Le Livre de la Création et de l'Histoire, by Cl. Huart.

Türikh-i Jahān-ghāshāh of Juwaynī, by Mirzā Muhammād of Qazwīn.

Aērpatastān and Nirangastān . . . tr. by Sohrab Jamshēdji Balsara.

The Coming and Passing of Zoroaster, by Reby.

The Poetry of Ancient Persia, by M. Pithawalla.

The Tribes and Castes of the Central Provinces of India, by R. V. Russell, vols. 1, 2, 4.

The Geographical Part of the Nuzhat al-Quhb, by Hamd Allāh Mustāfi al-Qazvīni.

The Origins of the Islamic State, by Ahmad ibn Yahyā, called al-Balāhī, tr. P. K. Hitti, vol. 1.

The Shāh, by W. W. Cochrane, vol. 1.

Some Principles of Algonquin Word-formation, by W. Jones.

An Account of the Different Existing Systems of Sanskrit Grammar, by S. K. Belvalkar.

Introduction to Indonesian Linguistics, by R. Brandstetter.

The Educational Directory of India, 1916.

ELECTION OF HONORARY MEMBERS

The Corresponding Secretary then presented the report of the Directors regarding new members, recommending the election of 72 corporate and 2 honorary members. In order to give the Directors opportunity for further consideration, it was voted to postpone the election of corporate members to a subsequent session. The honorary members were elected by unanimous vote, as follows:

Professor EDOUARD CHAVANNES

Professor SYLVAIN LÉVI

ELECTION OF OFFICERS FOR 1917-1918

The committee appointed to nominate officers for the year 1917-1918, consisting of Dr. Charles J. Ogden, Mr. Wilfred H. Schoff, and Dr. James B. Nies, presented its report thru Dr. Ogden, as follows:

President—Professor Charles C. Torrey, of New Haven.

Vice Presidents—Professor Richard J. H. Gottheil, of New York; Professor Maurice Bloomfield, of Baltimore; Professor Henry Preserved Smith, of New York.

Corresponding Secretary—Professor Franklin Edgerton, of Philadelphia.

Recording Secretary—Dr. George C. O. Haas, of New York.

Treasurer—Professor Albert T. Clay, of New Haven.

Librarian—Professor Albert T. Clay, of New Haven.

Editor of the Journal—Professor James A. Montgomery, of Philadelphia; Dr. George C. O. Haas, of New York.

Directors, Class of 1920—Professor Paul Haupt, of Baltimore; Professor James Richard Jewett, of Cambridge; Professor Roland G. Kent, of Philadelphia.

The officers thus nominated were thereupon duly elected.

The Society then adjourned for the day.

THIRD SESSION

The third session began at 9:32 a. m. on Wednesday morning, in the House of the Academy, with the President in the chair.

The Corresponding Secretary read a telegram from Professor Gildersleeve in which he thanked the Society for its message of greeting and sent best wishes for the success of the meeting.

The following communication was then presented:

Professor C. C. TORREY, of Yale University: The need of an American Oriental Review.—Remarks by Professors Lanman, Clay, and Barton.

After the discussion it was voted to refer the question of the establishment of an American Oriental Review to the Publication Committee with power to take action, if feasible.

The reading of communications was continued, as follows:

Mr. L. DOMINIAN, of the American Geographical Society: The site of Constantinople: a factor of historical value. (Presented in abstract by the Corresponding Secretary.) [Printed in the JOCRXII, 37, 57-71.]

Professor C. R. LANMAN, of Harvard University: The Harvard Oriental Series: its purpose and setbacks and progress.—Remarks by Mr. Westermeyer, Professor Fallerton, Dr. Coomaraswamy, and Professor Barton.

This series, founded about twenty-five years ago by Professor Lanman with the aid of the late Henry Clarke Warren, consists of texts and translations of the literary monuments of ancient India, and of investigations concerning the history and religious antiquities of India. The war is hampering the whole undertaking in the gravest manner, in part because the contributors are scholars of Europe and India, in part because the Oriental printing is done at Oxford and Bombay. In spite of all this, however, 21 volumes are out, 3 nearly finished volumes are held up by the war, and 8 are in press and should be ready in a few weeks—32 in all—while yet others are far advanced in preparation or nearly ready in manuscript.

The Society voted to extend its congratulations to Professor Lanman on the splendid results of his labors in conducting this great enterprise.

Further communications were then presented, in the following order:

Professor J. MOSAVERDZEH, of Hebrew Union College, Cincinnati: Semitic birth ceremonies and the rite of circumcision.—Remarks by Professor Jastrow and Dr. Kyle.

Various peculiar rites were performed by Semitic peoples at child-birth, such as offering a tabu-sacrifice, cutting the child's first hair, rubbing the child with salt, etc. At birth and for seven days thereafter a child was thought to be under the influence of evil spirits and therefore tabu. It was freed by the performance of these rites, usually on the eighth day after birth. Similar rites were performed at other critical moments of life (puberty, marriage, etc.), when danger from evil spirits threatened.

Professor A. J. CANNOY, of the University of Pennsylvania: Healing gods and storm-gods in Iran.

The relation between storm, fertility, and healing powers found by Professor Hopkins in the Vedic god Indra is present in other Indian deities and in the religions of other peoples. It is especially clear in the Persian healing hero Faridun, and one can demonstrate that it existed also in Izmru (Aryaman), in the sacred tree *goharid*, etc.

Professor P. HARRIS, of Johns Hopkins University: The Son of Man—Remarks by Professors Schmidt, Brinton, Warren, Montgomery, and Morgenstern, and reply by Professor Haupt.

'Son of man' is the common Aramaic term for 'man.' The original meaning is 'son of a man,' not a 'son of a nobody' (Assyr. *mdr id-simma*). In the Code of Hammurapi *mdr asilli*, 'son of a man,' denotes a 'full-born man,' while *masikis* is a 'free-born man.' The primary connotation of the term 'son of man' was 'gentleman'; afterwards it was employed for 'man' in general, and 'man' may be used for 'me' and 'I': 'A man cannot do it' may mean 'One cannot do it' or 'I cannot do it.' This was the original meaning of the phrase in the Gospels (cf. Matthew 7. 20; 11. 19).

Dr. J. E. ANNOTT, of Summit, N. J.: Dayñeshwar, the Mahārāshtra saint and poet.—Remarks by Professor Hopkins.

The tradition in Western India that Dayñeshwar was the first in the line of Marathi poets has strong corroboration. He lived during the reign of Bānbandra, and a short note at the end of his commentary on the Bhagavad-gītā gives the date of the completion of that work as 1290 A. D. His purpose in composing in Marathi was that the common people might understand their own scriptures and profit thereby. His writings are not now easily understood by the people because of their obsolete form and vocabulary, but they are highly and justly honored. Thousands of pilgrims visit his shrine each year.

Professor M. JASTROW, Jr., of the University of Pennsylvania: The Sumerian and Akkadian calendar.—Remarks by Professors Haupt and Barton.

A study of the various calendars in use in Babylonia and Assyria at different periods, on the basis of a renewed study of the text 5 Rawlinson, pl. 48, supplemented by the nomenclature in early business documents, in Cappadocian and Elamite texts, and in the historical and astrological literature of Babylonia and Assyria. The Sumerian calendar is based on a year beginning in the fall; the Akkadian, on one beginning in the spring.

It was voted to reconvene at 2:30 p. m. (instead of at 2 p. m., as planned), and the Society then, at 12:43 p. m., took a recess until the time set.

FOURTH SESSION

The fourth session was opened at 2:50 p. m., with the President in the chair, and the presentation of papers was resumed, as follows:

Dr. M. O. KYLE, of Philadelphia, Pa.: A new solution of the Pentateuchal problem.—Remarks by Professor Morgenstern and additional observations by the author.

A brief and popular statement of a very extended study based on the use of words in the Hebrew original and upon a technical classification of the Pentateuchal laws. The results furnish a very simple and satisfactory explanation of the peculiarities of style in different parts of the Pentateuch and afford an interesting and somewhat surprising comparison with the divisions of the Pentateuch suggested by the current Documentary Hypothesis.

Professor F. ELLIOTT, of the University of Pennsylvania: The Kashmirian Pañcatantra, and its position among versions of the Pañcatantra.

There are 5 streams of tradition of the Pañcatantra. I. The Kashmirian Pañcatantra, or *Tantrikhyāyika* (discovered about 1903;

imperfectly ed. by J. Hirtel); the closest of the extant versions to the original, but still very far from it (esp. in numerous additions). 2. Pahlavi (Syriac, Arabic); based on an old Skt. text probably superior to the *Tantrākhyāyika*. 3. 'N.W.' (whence the Southern and Nepalese versions, *Hīnapādīa*): abbreviated; otherwise original. 4. *Bhāratāthā*: greatly abbreviated; poetic, hence inoriginal in details. 5. *Simplicior*: generally speaking farthest from the original; expanded.—All these five are derived ultimately from one lost 'Urtext'; no closer relationship between any of them is demonstrable.

Professor N. SCHMID, of Cornell University: The two recensions of Slavonic Enoch.

It is generally recognised that we possess two different recensions of Slavonic Enoch, one longer than the other. Charles and Bonwetsch regard the longer recension as the more original, and the shorter as an incomplete edition. The difficulty with this view is that the latter would then by accident, since intention is inconceivable, have left out just those passages and turns of expression that have been relied upon to prove that the work was written in Greek by an Alexandrian Jew. The two recensions are most naturally explained on the supposition that the shorter text represents the first Slavonic translation made from a Greek version of a Hebrew or Aramaic original, while the other is a later Slavonic version made from a different Greek manuscript which had been amplified by some Alexandrian copyist.

Mr. W. H. SCHROEDER, of the Philadelphia Commercial Museum: Navigation to the Far East under the Roman Empire.

Professor H. J. CADBURY, of Haverford College: An English version of the word-play in Amos 9. 1, 2.—Remarks by Professor Haupt and Dr. Kyle.

Dr. W. F. ALBRECHT, of Johns Hopkins University: Gilgames and Enkidu, Babylonian genii of fertility.

Enkidu is identical with Gira-Sakan, a god of fecundity and specifically of animal husbandry. Apparently there are two principal Sakan types: a native one, associated with the gazelle, and an exotic, perhaps Gubern, sun-divinity. The heroic figure on archaic cylinders, impregnating a gazelle, is Sakan. Gilgames, primarily a god of sprouting vegetation, also represents the sun as the power causing growth. The oldest forms of his name, (2) *Gis-gibil-ga-mes* and (4) *Gis-gibil-ga-mes*, both stand for "(2) *Gis-gibil-ga-mes*, 'the torch [elsewhere an epithet of Gilgames as sun-god] of Ga-mes [the hero of fecundity, cf. *akka-mes* 'senator'],' which is thus, like Enkidu, a secondary theophorous name.

Professor Breasted gave a brief account of the inception and publication of his book 'Ancient Times: A History of the Early

World,' which, altho a high-school textbook, contains fully 220 pages devoted to Oriental history.

The Corresponding Secretary then presented the following paper in abstract, the author being unable to be present at the sessions:

Miss M. H. GÄICKLER, of Edinboro, Pa.: A study of the aorist, imperfect, and perfect tenses in the Rig-Veda, early and late.

In the earliest period of the Rig-Veda, the aorist and imperfect are used without difference; the aorist expresses duration of time, or is used historically or in narration, in conjunction with and equivalent to the imperfect and the perfect. But in the latest Rig-Veda period only the imperfect and perfect tenses are used narratively, and the aorist has the value that it has in the later classical Skt.—that is, it expresses an event which happened in the immediate past. Especially in the early period, all the past tenses may be used for the present also, since it is impossible to establish a definite boundary between what is and what has been.

The Society then proceeded to the consideration of items of business postponed from previous sessions and those appointed for this session.

MIDDLE WEST BRANCH OF THE SOCIETY

It was reported that, in pursuance of action taken by the Directors at the meeting in Washington in 1916, steps had been taken toward the formation of a Middle West Branch of the Society, and that a meeting of Orientalists of the West had been held at Chicago on January 27th, 1917 (see the report of the Proceedings printed in the *JOURNAL*, 36, 423-425). Professor Jastrow reported that the Directors recommended the adoption of four additional articles of the By-Laws, to provide for the organization of branches of the Society. The first three of the articles submitted were adopted without a single dissenting vote, as follows:

ARTICLE X. To provide for scientific meetings of groups of members living at too great a distance to attend the annual sessions of the Society, branches may be organized with the approval of the Directors. The details of organization are to be left to those forming a branch thus authorized, subject to formal ratification by the Directors.

ARTICLE XI. Upon the formation of a branch, the officers chosen shall have the right to propose for corporate membership in the Society such persons as may seem eligible to them, and, pending ratification according

to Article IV of the Constitution, these candidates shall receive the Journal and all notices issued by the Society.

ARTICLE XII. The annual fee of the members of a branch shall be collected by the Treasurer of the Society in the usual manner, and in order to defray the current expenses of a branch the Directors shall authorize the Treasurer of the Society to forward from time to time to the duly authorized officer of the branch such sums as may seem proper to the Treasurer. The accounts of the Treasurer of the branch shall be audited annually and a statement of the audit shall be sent to the Treasurer of the Society to be included in his annual report.

After discussion of the final article to provide for representation of a branch on the Board of Directors, it was voted to refer it back to the Directors for further consideration.

REPORT OF THE EDITORS OF THE JOURNAL

The report of the Editors of the Journal was presented by Professor Montgomery, as follows:

The Editors beg to report the completion of Volume 36 of the Journal, consisting of 400 pages, in the usual four parts, the first of which was edited by their very esteemed predecessor, Professor Terry. The volume, which was to have been dedicated to Dr. William Hayes Ward in commemoration of his 80th birthday, now bears his name on the title-page *In Memoriam*.

The size of the volume has not been decreased, altho the cost of printing is considerably greater here than abroad and the price of paper is rapidly rising. We suggest that contributors practise the greatest economy in the use of unusual types and assist in keeping down the expense by the most careful preparation of their copy.

In addition to the longer papers, which must constitute the permanent value of the Journal, we desire to encourage the contribution of Brief Notes, on subjects of fresh and original interest, which will probably be read by a wider circle of our constituency than the long papers. A department of Personalia, which we have established, will also serve for the exchange of personal news in the Oriental world.

We expect hereafter to publish the Journal in five parts, and at the same time to make its year coincide with the calendar year. To accomplish this, volume 37 (for 1917) will appear in four parts, in May, July, October, and December. Volume 38 (for 1918) will appear in February, April, June, October, and December. It will be noticed that the last digit of the volume number thus becomes the same as that of the year of publication—a coincidence of decided practical value.

Arrangements are being completed with the Yale University Press for that corporation to act as our publisher. It will handle all the business of circulation and sale of copies, and we shall have the advantage of having the Journal included in its trade-lists.

In conclusion we welcome the increase of the scholarly assets of the Society furnished by the recently organized Middle West Branch, the profits of which are already accruing to the Journal.

ELECTION OF MEMBERS

The following persons, recommended by the Directors, were elected members of the Society:

HONORARY MEMBERS

Mr. Leonard W. King

CORPORATE MEMBERS

Mr. T. George Allen,	Mrs. Fletcher Ladd,
Mr. Lament Barbour,	Prof. G. Laasdstrom,
Mr. Carl W. Bishop,	Dr. Keaneth S. Latourette,
Mr. Maurice Block,	Rabbi Morris S. Lazarev,
Prof. Leonard Bloomfield,	Mr. Gerson B. Levi,
Mr. Gustav von Brauchitsch,	Rabbi Felix A. Levy,
Miss Caroline May Breyfogle,	Prof. Albert Howe Lybyer,
Rev. Chas. D. Brokenshire,	Mr. Walter A. Maier,
Mr. Ludlow S. Bull,	Mr. Shiphry E. Malouf,
Prof. Moses Battenwieser,	Rabbi Louis L. Mann,
Mr. E. H. Byrne,	Mr. S. H. Markowitz,
Mr. Augustus Stiles Carrier,	Mr. John Martin,
Mr. Arthur H. Clark,	Rev. John A. Maynard,
Rabbi Samuel S. Cohen,	Mr. Frederick McCormick,
Dr. Ananda K. Coomaraswamy,	Mr. J. F. McLaughlin,
Mr. Edwin Sanford Crandon,	Mr. Theophile J. Meek,
Hon. Alexander DelMar,	Mr. Walter Miller,
Mr. Gottthard Deutsch,	Hon. William Phillips,
Dr. George S. Duncan,	Rabbi Julius J. Price,
Mr. William F. Edgerton,	Prof. Eduard Prokosch,
Mr. Granville D. Edwards,	Mr. Charles Lynn Pyatt,
Mr. Albert W. Ellis,	Mr. George H. Richardson,
Mr. Eugene Fair,	Dr. J. G. Rosegarter,
Rev. Dr. Hughell E. W. Foshrook,	Dr. Moses Seidel,
Prof. John Fryer,	Mr. O. R. Sellers,
Mr. Carl Gammie,	Mr. H. B. Sherman,
Mr. Alexander B. Galt,	Mr. Joseph Stoltz,
Rev. Raymond F. Gavin,	Prof. Herbert Cushing Tolman,
Rev. A. H. Godbey,	Rev. Samuel W. Wass,
Mr. Edward A. Henry,	Mr. Thomas Weirring,
Mr. Emil G. Hirsch,	Mr. Herbert L. Willett,
Dr. Stanley K. Hornbeck,	Dr. Henry A. Weifson,
Mr. Fred T. Kelly,	Prof. William H. Wood,
Mr. J. L. Kingsbury,	Miss Marguerite Woodward,
Dr. K. Kohler,	Dr. J. E. Wrench,
Mr. George S. S. Kakhi,	Mr. J. Hubert Zimmerman.

It was announced for the Directors that the next annual meeting would be held at New Haven on Tuesday, Wednesday, and Thursday of Easter Week, April 2d, 3d, and 4th, 1918.

The Corresponding Secretary reported that the Directors had considered the possibility of obtaining the removal of the restriction as to place of meeting, and that they recommended, after careful investigation and report on the part of a special committee, the adoption of a resolution to present the following petition to the General Court of the State of Massachusetts:

To the Honorable,

THE GENERAL COURT OF THE STATE OF MASSACHUSETTS:

THE AMERICAN ORIENTAL SOCIETY, a corporation incorporated by the laws of Massachusetts, hereby respectfully petitions your honorable body to enact an amendment to the act of the year 1891, entitled 'An Act to authorize the American Oriental Society to hold its meetings without the Commonwealth' (Stat. Mass. 1891, C 335), by striking out of Section 1 of the aforesaid Act the words: 'provided, however, that said society shall meet within this Commonwealth at least once in three years.'

The purpose of the proposed amendment is to afford the Society greater liberty in the choice of places of meeting. While the Society would, in case the petition is granted, expect to continue to meet occasionally in Massachusetts, nevertheless present-day conditions, and the rapid growth of the Society, render it essential to its welfare and the furtherance of its objects that it be allowed this greater liberty. Complete freedom of action in regard to place of meeting is allowed to the American Folk-Lore Society, under a provision of its charter (Stat. Mass. 1893, C 389), which permits it to hold meetings without the Commonwealth, absolutely. The American Oriental Society is therefore encouraged to hope that your honorable body will see fit to accord the same privilege to this Society.

Respectfully submitted,

_____, President,

_____, Recording Secretary,

_____, Corresponding Secretary,

for the American Oriental Society.

It was unanimously voted, 26 members being present, to present this petition to the General Court of the State of Massachusetts.

Professor Jastrow, as chairman of a committee of the Directors to consider a number of projects suggested for a proposed American Oriental Series, reported that the Directors ask the Society to give its endorsement to the three projects considered and approved by the committee, so that steps could be taken for their publication if funds were obtained for the purpose. The projects recommended for endorsement were:

1. A Tagalog Grammar, by Dr. Frank R. Blake, which is ready for the press.
2. A Pali Dictionary, which is urgently needed and would form a most valuable contribution to Indology.
3. A new Assyrian Dictionary to supplement those hitherto published.

It was voted to give the approval of the Society to the three projects of publication.

On motion, the following resolution was unanimously adopted:

The American Oriental Society desires to express its thanks to the American Academy of Arts and Sciences for welcoming the Society to its House, to the Harvard Club and the College Club for extending courtesies to the members, and to the Committee of Arrangements and the local members for the thoughtful and generous provision made for the comfort and entertainment of those attending the meeting.

The President then announced the following appointments:

Committee of Arrangements for 1918: Professors Clay, Hopkins, and F. W. Williams, and the Corresponding Secretary.

Committee on Nominations: Professors Schmidt, R. G. Kent, and Worrell.

Auditors: Professor F. W. Williams and Professor Hopkins.

The Corresponding Secretary then read abstracts of three papers, as follows:

Professor A. EAEER, of Johns Hopkins University: (a) New Semitic-Egyptian words; (b) Some African words in Old Egyptian.

(a) *Umm* 'ram' (preserved only in the name of the god Khaum): Arab. *hamal* 'lamb, ram'; *bd* 'thigh'; Arab. *fabiq* 'thigh'; *sm* 'plant' (Pyramid Texts); Assyr. *simmu* 'plant'; *tpm* 'cumin'; Assyr. *tappiu* 'cumin' (?); *hd* 'slay'; Arab. *hadaba* 'slay'; *mt* 'the god Monti'; Heb. *milikk* 'king'; *mn* 'Min'; Arab. *Mansit*; etc.

(b) Eg. *nfr* 'be good, beautiful': Bedanya *esfer* 'be sweet'; Eg. *hj* 'husband': Bedanya *hj* 'husband'; Eg. *mr* 'chisel' (preserved only in the sign value of the chisel): Amharic *mérō* 'chisel'; Eg. *dag* 'dwarf': Amharic *desk* 'dwarf'; Eg. *fnq* 'nose': Amharic *afengi* 'nose'; etc.

Professor P. HAUPP, of Johns Hopkins University: (a) The last words from the cross; (b) The Babylonian origin of the term 'naphtha.'

(a) The first 2 lines of Ps. 22 are corrupt: instead of *eli, eli* we must read *elé-eli*, 'to my God,' and this should stand at the beginning of the second line, while 'my God' at the beginning of the second line should be prefix to the first.

(b) The term 'naphtha' must be derived from Assyr. *nabātu* (or *nabātū*) 'to shine.'

Professor J. A. MONTGOMERY, of the University of Pennsylvania: (a) The Babylonian *nishu*, 'oath,' in the Haddad Inscription, lines 28, 29; (b) Last lines of the South-Arabic text, Glaser 282.

(b) Interpretation on the basis of *PTH* = 'law' and *SM* = 'witness' (see Hommel, *Sibiarabische Chrestomathie*, p. 115).

The Society adjourned at 5:47 p. m., to meet for a few minutes in the evening at the call of the President.

SPECIAL SESSION

A brief session was held at the Hotel Brunswick, on Wednesday evening, in the course of the annual dinner, beginning at 8:43 p. m., with the President in the chair.

The Corresponding Secretary reported that the Directors submitted the following revised form of the proposed Article XIII of the By-laws, with their recommendation for its adoption:

ARTICLE XIII. The President and Secretary of any branch duly authorized as provided under Article X shall have the right to sit *ex officio* with the Directors at their meetings and to take part in their deliberations.

On motion, this addition to the By-laws was adopted by a unanimous vote, and the formal session for the consideration of business was adjourned at 8:45 p. m.

The following communications were presented by title:

Dr. W. F. ALBRIGHT: Mesopotamian vice-goddesses.

Professor L. C. BARRETT: An objection to the group-theory of religion.

Professor C. E. CONANT: Analogic changes in Indo-Asian numerals.

Professor K. FULLERTON: Extracts from a Kodak journal in Syria and Palestine, 1914.

Professor P. HAUFF: Semites, Hebrews, Israelites, Jews.

Professor E. W. HOPKINS: Indra and other gods of war and fertility combined.

Professor E. W. HOPKINS: The origin of the ablative case.

ANCIENT BABYLONIAN EXPRESSIONS
OF THE RELIGIOUS SPIRIT

THE PRESIDENTIAL ADDRESS FOR 1917*

GEORGE A. BARTON
BRYN MAWR COLLEGE

There is no more fascinating field of study than the attempts of men to come into relationship with the unseen powers of the universe. These attempts vary with intellectual development all the way from the materialistic attempts of the savage to the spiritual and ethical conceptions of the highest religious systems. The most interesting phases of religious expression are those found at the two extremes of the evolutionary curve. Naturally no early system of religious thought can equal in interest that which stands at the verge of present knowledge and seeks to interpret the eternal mystery to the needs of present-day life. Next in interest, however, to this is the study of religious beginnings. There is about them something of the freshness of childhood, and we delight in following their thought as we delight in the expressions of children. It is because the Babylonian expressions of the religious spirit are expressions from the childhood of our race, that they become fascinating and important. It is true that they do not belong to the earliest childhood—they do not come from the period of savage life—but they express the religious conceptions, emotions, and aspirations of a great nation, composed by the amalgamation of two great races, just after the threshold between savage and civilized life had been passed. Ancient Babylonia had, in the whole course of its history, no great prophet to transform its religion. So far as we know no one attempted to do even what Amenophis IV tried unsuccessfully to do in Egypt. No prophet or reformer, like Amos, or Zarathushtra, or Gautama, or Vardhamāna, or Lao-tse, transformed religious thought and created in Babylonia a positive religion. No philosophers like the authors of the *Upanishads* and the projectors of the later systems of India, or like Socrates

* Delivered before the American Oriental Society in Boston, April 10, 1917.

and Plato, subordinated the comparatively primitive conceptions of the universe to a more intellectual system of thought, and no great teacher like Confucius made these conceptions subordinate to an ethical system. Ethical conceptions were not lacking. For example in the *Maqlu* incantation-texts (2.81-84) we come upon this protestation of lofty conduct—a passage that reveals the Babylonian ideal of personal life:—

Those who were dying, I made to live;
Those who were cursed, I guided aright;
Those who were perishing, I rehabilitated;
Those who were weak, I strengthened.

This bit of ethical perception is, however, buried in a mass of ritual intended for exorcism. The compiler of the text betrays no conception that it was more important than the statements about spooks and vampires and the charmed words for their control by which it is surrounded.

If then, we would make a fair estimate of ancient Babylonian expressions of the religious spirit, we must compare them not with the sayings of Hebrew prophets, or the *Gāthās* of Zoroaster, or the utterances of India's philosophers and reformers, or the teachings of Lao-tse or Confucius, but with the religious utterances of Egypt, of Vedic India, and of China before the rise of her sages.

In Chinese literature some primitive religious expression has survived in the *Shu King*, or ancient book of history, the *Shih King*, or book of poetry, and the *Li Ki*, or book of rites. The revelation made by these books is reinforced by the survival in Chinese life of the belief in spirits, and the perpetuation in the state religion of an ancient ritual that finds many parallels in Babylonian ceremonial.

The Babylonian liturgies afford us glimpses of stately ceremonies on which great reliance was placed in maintaining friendly relations with the supernatural powers, and the one fact that stands out most prominently is that to the ancient Babylonians as to the Chinese the universe was peopled with myriads of invisible spirits. In Babylonia, China, and Egypt charms against spirits, exorcisms, and magic abounded. As yet, however, no Babylonian parallels have been discovered to parts of the Chinese *Shih King*, or book of poetry, or to the

love-poetry of the ancient Egyptians. The Babylonians shared with other peoples the tender passion. From Egypt love poems have come in which one finds such stanzas as this:—

New wine it is to hear thy voice;
I live for hearing it.
To see thee with each look,
Is better than eating and drinking.¹

Similarly in the pre-Confucian Shih King, or Book of Odes, there come to us from China, among poems that have more or less connection with the ritual, stanzas like this:—

If you will love me dear, my lord,
I'll pick up my skirts and cross the ford;
But if from your heart you turn me out . . .
Well you're not the only man about,
You silly, silly, silliest lout!²

If, however, any of the ancient Babylonians committed such sentiments as these to a clay tablet, it has not been discovered. If one of them ever directed a sonnet to his lady's eyebrow, he would seem to have been of too frugal a turn of mind to waste good clay in giving it permanence. Some few chronicles have come down to us from early times, but for the rest the literature consists of endless commercial transactions and religious epics, hymns, liturgies, and incantations.

The poetry of the Sumerians of Babylonia was in form of the simplest sort. Most of it consists of lines of similar length which make rude parallelisms. At times the length of these lines is very unequal. In some of the compositions a rhythm is apparent as one passes from line to line, but at times this also fails us. Sometimes as in some of the Hebrew Psalms a refrain is brought in at intervals, but such occurrences are not frequent. In parts of some of the penitential psalms a refrain occurs in every alternate line, as in Psalm 136 of the Psalter. These points may be briefly illustrated by quotations from a hymn to the mother goddess translated by Radan in the *Hilprecht Anniversary Volume*. The following passage illustrates both the rhythm and the refrain:—

¹ Cf. G. A. Barton, *Archaeology and the Bible*, Philadelphia, 1916, p. 416.

² From H. A. Giles, *History of Chinese Literature*, New York, 1901, p. 14.

To the king's holy foundation || with uplifted head I will go;
 To the foundation of the goddess || with uplifted head I will go;
 To the foundation of Idia-Dagan || with uplifted head I will go;
 For Dagal-Ushumgal-Anna || the bodehamber I will prepare.

Although there is in the Babylonian religious poetry nothing as beautiful as some of the hymns of the Veda, many passages have a dignified beauty of their own. Thus in the hymn just quoted we read:—

The abode of the holy one I will sanctify;
 Songs of praise I will sing to her;
 The glory of my princess in heaven and upon earth
 Aloud I will proclaim
 Unto my holy goddess;
 Before her I will rejoice;
 "Princess exalted to the heavens,
 Goddess, thou art sublime!
 Maiden goddess, thee must one reverence!
 Princess exalted to the heavens,
 Like Ann thou art sublime."

One who approaches the study of the ancient poetry of the Babylonians is met by an initial difficulty. The interpretation of the Sumerian language is still in its initial stages. The late Professor William James once said that he would not be so bold as to say that he knew what the teaching of Hegel was; that, if one thought he had an idea of what the great idealist meant, when he announced it, some ardent disciple of the German master would arise to say that that was all wrong; Hegel never meant that, but something quite different. It is still somewhat thus in the interpretation of Sumerian texts. We are never sure that we have caught the real meaning of a unilingual Sumerian text until its interpretation is established at the mouth of two or three witnesses; and sometimes the testimony of the witnesses is quite divergent. Nevertheless we do know enough of the form and content of ancient Babylonian religious expression, even in its Sumerian dress, to enable us to appraise its value and to compare it with other national expressions of the religious consciousness in the ancient Oriental world. If, however, I cite in the remarks that follow examples from unpublished texts that I alone have as yet had opportunity to study, you are duly warned to take the translations *cum grano salis* until others have had opportunity to study them also.

The earliest extant religious text from Babylonia—a text from the dynasty of Agade—is in many respects an excellent example of the whole. This is the text which I had the honor of bringing to the notice of this Society three years ago, and it will, I hope, be given to scholars within the next year in a volume now in preparation. It is an incantation. Those who composed it believed the air as full of demons as the Chinese do. A portion of the text consists of magic words which were believed to have power to ward off these spirits. Some of these words are:—

The light of the city—to the light of the city
Fly not!
The darkness of the city—to the darkness of the city
Fly not!
The people of the city—to the people of the city
Fly not!

(Col. x.)

The haunting terror expressed here is characteristic of much of ancient Babylonian life. A later text describes these spirits as follows:—

Destructive storms and evil winds are they,
An evil blast that heraldeth the baneful storm,
An evil blast forerunner of the baneful storm.
They are mighty children, mighty
Heralds of Pestilence,
Throne-bearers of Ninkigal (goddess of the Underworld)
They are the flood which rusheth through the land.

(Thompson, *Devils*, I. 63.)

Another text speaks of them thus:—

From the Underworld have they gone forth:

The evil spirit that in the desert smiteth the living man,
The evil demon that like a cloak enshroudeth the man,
The evil ghost, the evil demon that seize upon the body,
The hag-demon and ghoul that smite the body with sickness,
The phantom of night that in the desert roameth abroad,
Unto the side of the wanderer have drawn nigh,
Casting a woful fever upon his body.

(*Ibid.*, p. 7.)

From the haunting terror of this fear the Babylonians, like others, found from the earliest times some refuge in their belief

in favoring gods. Thus the cylinder from the Dynasty of Agade already cited makes the following appeal:—

O lord of darkness, protect man!
 O lord of light, protect man!
 O lord of the feast, protect man!
 O lord of the sanctuary, protect man!
 The grain for thy animals raise up!
 O god, be favorable to man!

(Cf. iii.)

The faith that helpful spirits will protect is, however, universal among men and is the basis of all religion.

Even when friendly relations with such spirits had been established, misfortune and trouble still came. It was consequently supposed that the friendly spirits had been offended by some misdeed of the sufferer. Thus arose the so-called penitential psalms, which have been known and studied longer than any other kind of Babylonian religious literature. These psalms abound in such cries as that in a prayer to Ishtar* :—

O lady, in sadness of heart I raise to thee my pitous cry, 'How long!'
 O lady, to thy servant speak pardon, let thy heart be appeased!
 To thy servant who suffers pain, grant favor!
 Turn thy gaze upon him, receive his entreaty!
 To thy servant with whom thou art angry, be favorable!
 O lady, my hands are bound, I turn to thee!
 For the sake of the exalted warrior, Shalmash, thy beloved husband, take away my bonds!
 Through a long life let me walk before thee!

Such plaints as this have often been compared to some of the plaintive cries in the Hebrew Psalter. Nothing is known to me in the hymns of Egypt or in the Veda that possesses this penitential quality in like degree, although a few of the Vedic hymns to Varuna closely approach it. The conception of the spirits that prevailed in China rendered such expression unthinkable. Closely connected with the penitential literature are the dirges. Those that have come down to us are dirges for Tammuz, the god of vegetation, whose death was bewailed each year. Some of these have been made known, at least to scholars, through the translations of Professor Zimmern and others. There is in them much plaintive iteration, as, for example, in that published in *CT* 15, 18:—

* From Haupt, *ASKT* 122.

The lord of vegetation no longer lives;
 The lord of vegetation no longer lives [repeated six times; then:]
 . . . my husband no longer lives;
 My god Damm no longer lives;
 The god Ama-sunungalanna no longer lives;
 The lord of Aralla (Sheol) no longer lives;
 The lord of Dur-gurgurri no longer lives;
 The bright lord Tamuz no longer lives;
 The lord of the dwelling no longer lives;
 The spouse of the lady of heaven no longer lives;
 The lord of Eturra no longer lives;
 The brother of the mother of the vine no longer lives.

In a similar vein the dirge continues through many lines. It is, doubtless, a sample of the iteration with which human dead were bewailed.

From Egypt, where similar beliefs were held concerning the death and resurrection of Osiris, no such dirges have, so far as I know, come down to us. The Egyptian belief in the life beyond the grave led them to lay the emphasis on the resurrection of Osiris, a resurrection in which, in course of time, it was believed that all Egyptians might share, rather than upon his death. In Egyptian texts relating to Osiris there is accordingly a note of triumph and praise. In Babylonia, where no such vivid hope of a bright after-life was entertained, the emphasis was rather on the pathos of parting; hence such dirges as that quoted.

The heart of all religious worship is prayer, and from Babylonia not a few prayers have come to us. In these prayers the Babylonian deities are conceived in quite an anthropomorphic fashion. The prayers begin with words of praise which set forth in an impressive way the majesty and glory of the god. Such recognition of a deity's greatness predisposed him to be gracious to a suppliant that held such accurate views of the divine majesty. While this motive doubtless was present in the minds of those who composed the prayers, there was combined with it another motive. If a worshiper is to gain from the experience of prayer the psychological effect upon himself that is desirable, he must have a sense of the majesty, awe, and mystery of the divine being whom he approaches. In Egyptian temples—and the same is true (*mutatis mutandis*) of the temples of many other peoples—one approached the temple through avenues of

impressive sphinxes, he entered it through a majestic pylon, he approached the holy of holies through awe-inspiring courts and shadowy hypostyle halls. The approach suggested the majesty of the divinity that dwelt within. The suppliant was thrown by his approach into a devout frame of mind, so that he uttered his prayer in due humility and awe. Our Calvinistic forefathers, who worshiped in plain meeting-houses, accomplished the same psychological result by the use of majestic words, addressing God as the All-wise, Omnipotent Ruler, who dwells in the light that no man can approach unto, who is above cherubim and seraphim, who, himself holy, reads the inmost thought of sinful man, etc. In other words, by the employment of majestic phrases they created a psychological avenue of sphinxes and pylons through which the mind of the suppliant should pass, that it might be thrown into the proper spirit of prayer. In Babylonia both methods of creating the proper spirit were employed. The Babylonian temples, though apparently as a rule not so beautiful as the Egyptian temples of the days of the empire, were not lacking in the qualities that suggested to the mind of the worshiper the majesty of the indwelling divinity. But, as though this were not enough, their prayers, like those of the Puritans, began with expressions of the majesty of the god, which, couched in sonorous language, formed a psychological pylon as well. As an example we may take a prayer to Nergal published by L. W. King in his *Magic* (no. 27):—

O mighty, exalted lord, first-born of Nunamir,
 Prince of the Anunnaki, lord of battle,
 Offspring of Kurnahar, the mighty queen,
 O Nergal, mighty one of the gods, darling of Nimmenna,
 Thou art in the brilliant heavens, lofty is thy station,
 Thou art great in the Under-world, thou hast no rival,
 With Ea among all the gods is thy counsel inscribed,
 With Sin in the heavens thou searchest through all things,
 Enil thy father has granted thee the black-headed race, all living creatures,
 The cattle of the field, the animals, for thy hand to rule.

After this impressive approach comes the prayer:—

¹ Translated also in Böllnerücher's *Gebete und Hymnen an Nergal*, Leipzig, 1904, p. 14 f. The above translation is independently made.

I, so and so, the son of so and so, am thy servant;
The wrath of a god and a goddess rests upon me;
Uprooting and destruction dwell in my house;
Calling without answer prostrates me.
Because thou savest, O lord, I turn to thy divinity!
Because thou art compassionate, I seek thee!
Because thou appearst compassionate, I look to thee!
Because thou art merciful, I stand before thee!
Really look upon me! Hearken to my cry!

This is but one example out of many that might be given.

The gods to whom such appeals were made were of complex origin. The tribal deity of an ancient clan was often supposed to express itself through many natural phenomena and to do whatever needed to be done for the tribe. The mingling of various tribes in the melting-pot of the lower Mesopotamian plain had created polytheism and led to some distribution of functions to different gods, but many of the deities even then retained their complex character. As time passed certain men were deified. It is well known that Naram-Sin, Dungi, Bur-Sin, and Gimil-Sin were deified while still living. This process seems to have gone on in the case of other men. In the University Museum in Philadelphia there is a ritual to Ur-Engur, recently published by Dr. Langdon. In another text, which I have had the privilege of studying (an incantation), Entemena appears as a deity under the name Entem. The passage runs:—

With the god Entem, the mighty prince, are thy first-fruits,
His grain is the brilliance of the broad land;
With weighty kernels its heads grow.
Like a gardener with fruit he comes,
 to his people who are disobedient.
The mountain of Entem eager(?) he ascends;
 to the houses of men bowed down he comes;
The houses my protector establishes, he makes bright.

Further on in the next column a broken line runs:—

Favorable is Entem. . . .

While the Babylonian deities were complex in character, after some of them had been identified with the sun and moon, the hymns addressed to them tend to attribute to these deities the characteristics of their respective heavenly bodies. Much of the

imagery by which the majesty of Utu or Shamash, and of Nannar, En-zu, or Sin is depicted is borrowed from the appearance, the course, and the functions of these orbs of light. The deeds of Adda, too, the storm-god, are portrayed in descriptions of storms. It thus comes about that in some Babylonian hymns we find descriptions of nature, or certain phases of nature. As an example of these we may take the hymn to the moon-god, Nannar, published in *CT* 15, 16, 17:—

O brilliant bark of the heavens, ruler in thy own right,
 Thou standest, thou standest
 Before thy father Enlil. Thou art ruler,
 Father Nannar; thou art ruler, thou art guide.
 O bark, when standing in the midst of heaven, thou art ruler,
 Father Nannar, thou ridest to the brilliant temple.
 Father Nannar, when like a ship thou goest in the midst of the deep,
 Thou goest, thou goest, thou goest,
 Thou goest, thou shinest anew, thou goest,
 Thou shinest anew, thoulivest again, thou goest.

In these lines the sky is conceived as an ocean across which the moon sails as a ship sails across the sea. The Babylonians, like each of us, had watched the clouds flit across the moon's face, when it seemed as though the moon, not the clouds, were moving. If a cloud was especially thick, the moon disappeared for a time. All this is described in the words:—

Thou goest, thou goest, thou guest,
 Thou goest, thou shinest anew, thou goest.

The moon waxes and wanes. It seems to die and then is born again. This is depicted in the line:—

Thou shinest anew, thoulivest again, thou goest.

The earlier of the moon's phases are alluded to in a later line:—

When thy father looketh on thee with joy, he commandeth thy waxing.

Similarly the destructive storms which sometimes sweep over Babylonia are graphically described in some of the hymns to Enlil. Apparently the original Babylonian conception attributed these storms to Enlil, the lord of spirits. At all events at a later period the effects of the word of Enlil are described under the figure of a storm. A passage from Reisner's *Sumerische Hymnen*, no. 7, will serve as an illustration.

The word of the lord, his word,
 The word of the lord works disaster.
 The word of Gula, her word,
 The word of Enil, the hero, lord of the great city,
 Of him who comes from Mealam, great warrior with the dagger,
 The word on high makes the heavens howl,
 The word below makes the earth shudder,
 The word brings destruction to the Annumaki;
 No one receives it; no enchantor receives it.
 It is an on-rushing whirlwind before which none can stand;
 It makes the heavens roar, it makes the earth tremble.
 The bond between mother and child it breaks,
 It makes the luxuriant reeds to tremble, it shatters them.
 The wheat-harvest it takes as spoil,
 The on-rushing waters obliterate divisions,
 It is a flood which breaks the dyke.
 It rends asunder huge trees,
 With a roar they are hurled to the ground.
 When the hero, the lord of the great city makes a thunder-storm, no eye
 beholds it.

No one can read descriptions of Babylonian thunderstorms, such, for example, as that by Dr. Peters in his *Nippur*, I. 258-259, without realizing how true to experience this old Babylonian portrayal is. The passage not only gives us a vigorous description of a natural phenomenon, but reveals a point of view familiar to readers of the Old Testament. Just as the Hebrews thought thunder the 'voice of Yahweh,' so the Babylonians regarded it as the 'word' or 'utterance' of Enil.

In one of the hymns in which the thunder of Enil is described there is revealed an appreciation of a very different side of nature. This is the hymn published in *CT* 15.15, 16. Lines 13 and 14 read:—

The lightning of thy thunder shatters the head of the great mountain, O
 father Enil;
 Thy thunder fills the great mother Nisili with fear!

This touch reveals the masculine Babylonian bully of a husband blustering about and his wife cowering in fear. Possibly it is the full-grown Babylonian boy making his sister jump by the startling and incongruous noises which he suddenly produces. In whatever way one looks at it, the passage is a touch of nature that reveals the kinship of the whole world.

When all is said, however, it must be confessed that the appreciation of nature expressed in the Babylonian hymns does not equal that manifested in the Vedic hymns, either in depth of insight or in beauty of expression. There is, for example, nothing to compare in beauty with Hymn 50 of the first book of the Rig-Veda. (I quote from Dr. John Muir's translation.)

By lustrous heralds led on high,
The fire sun ascends the sky;
His glory draweth every eye.

The stars which gleamed throughout the night,
Now scared, like thieves shrink fast away,
Quenched by the splendor of thy ray.

Thy beams to men thy presence show;
Like blazing fires they seem to glow.

Conspicuous, rapid, source of light,
Thou makest all the welkin bright.

In sight of gods and mortal eyes,
In sight of heaven thou sealest the skies.

This Vedic poet embraced the whole scope of the sky in his view; Babylonian poets as a rule limit their view to one aspect closely connected with the god.

The Babylonians, as already noted, developed no such belief in a future life as was entertained by the ancient Egyptians. Perhaps at the beginning the conceptions of the two peoples concerning it were nearly parallel, but the Osiris myth gave the Egyptians a belief in a bright and happy immortality for that god—an immortality that was then believed to be shared by deceased kings and finally by all the people. In Babylonia the conception of the conditions of life after death are clearly set forth in the poem which describes Ishtar's descent to the lower world.

Where dust is their food, their sustenance, clay,
Light they do not see, in darkness they dwell.

The wistful longing of the Babylonians for a more cheerful immortality is touchingly revealed in the Gilgamesh epic through the attempt of Gilgamesh to attain a reunion with his friend Engidu, as well as in the closing lines of Ishtar's Descent. Both texts are well known. All such attempts seemed to the Baby-

Ionians of no avail. Their attitude is summed up in two lines in the twelfth tablet of the epic:—

I will sit all day and weep!
I will sit all day and weep!

The well known myth of Adapa shows that, to the Babylonian mind, a cheerful immortality had been denied them by the gods through jealousy.

Mention of the Gilgamesh epic is a reminder that one important form of expression of the Babylonian religious spirit has not been mentioned: I refer to the epic. As India had her *Mahābhārata* and *Rāmāyana* and Greece her *Iliad* and *Odyssey*, so Babylonia had her Gilgamesh epic and her epics of creation. The Gilgamesh epic is of a miscellaneous character. It contains both a patriotic and a mythological element. The strands of the two are woven together in a fashion as delightfully confusing as one need desire in a document coming from such an early date.

The Babylonian geniuses delighted especially in endeavoring to trace origins, especially the origin of the gods, the world, man, and the institutions of settled, civilized life. The best known of these productions is the epic of Creation, a part of which was discovered by George Smith more than forty years ago—an epic divided into seven tablets or cantos. So much has been written of it, and it is so often quoted that it may be supposed to be familiar to all members of the Oriental Society, even those that are not professional scholars. The older poem on the origin of civilization, found in 1882 by Rassam at Abu Habba and afterward published by Dr. T. G. Pinches, is also well known.⁴ Still another creation-poem ascribed the creation to Ashur.⁵ This, of course, had its origin in Assyria and circulated there. Three years ago Dr. Poebel published an early poem on the creation found among the tablets from Nippur—a briefer account than the later ones, as befits a poem written before 2000 B. C.⁶ Still more recently Dr. Langdon published another text which

⁴ See L. W. King, *Seven Tablets of Creation*, London, 1902; R. W. Rogers, *Cuneiform Parallels to the Old Testament*, New York, 1912, p. 3 ff. and 47 ff.; G. A. Barton, *Archaeology and the Bible*, p. 255 ff.

⁵ See King, *op. cit.* I. 197 ff.; Rogers, *op. cit.* p. 54 ff.

⁶ See A. Poebel, *Historical Texts*, Philadelphia, 1914, p. 9 ff.; Barton, *op. cit.* p. 278 ff.

portrays the origin of a city and the beginning of agriculture. Dr. Langdon saw in the text an account of the flood and the fall of man, which other scholars are unable to find in it, but the discussion to which this difference of interpretation has given rise has served to make scholars familiar with the existence of this interesting text.*

Perhaps I may be pardoned, if, in order to illustrate the kind of religious expression found in these poems and epics on crea-

OBVERSE

The mountain of heaven and earth
 The assembly of heaven, the great gods, entered. Afterwards
 Because Ashman¹⁰ had not come forth, they conversed
 together.
 The land Tikku had not created;
 5 For Tikku a temple platform had not been filled in.
 A lofty dwelling had not been built,
 The arable land was without any seed;
 A well or a canal(?) had not been dug;
 Horses(?) and cattle had not been brought forth,
 10 So that Ashman could shepherd a corral;
 The Anunna, the great gods, had made no plan;
 There was no *les*-grain of thirtyfold;
 There was no *les*-grain of fiftyfold;
 Small grain, mountain grain, and large *asal*-grain there was
 not;
 15 A possession and house there was not;
 Tikku had neither entered a gate nor gone out;
 Together with Nintu the lord had not brought forth men.
 The god Ug as leader came; as leader he came forth to plan;
 Mankind he planned; many men were brought forth.
 20 Food and sleep he planned for them;
 Clothing and dwellings he did not plan for them.
 The people with rushes and rope came,

* See S. Langdon, *The Sumerian Epic of Paradise, the Flood and the Fall of Man*, Philadelphia, 1915; Prines, *JAO* 36, 90-114, 269-273; Sayce, *Expository Times*, May, 1916; Jastrow, *JAO* 36, 122-135 and *AJSL* 33, 91 ff.; Barton, *op. cit.* p. 283 ff. and Langdon, *JAO* 36, 140-145.

* The tablet has since been catalogued as no. 14005. It will be published in a forthcoming volume, *Miscellaneous Religious Texts*.

¹⁰ A god of vegetation; Brühnow's *List*, 7484.

tion, I quote from an unpublished tablet a poetical account of the creation of man and the beginnings of civilization which I have recently had the good fortune to discover among uncatalogued tablets from Nippur in the University Museum in Philadelphia.¹ It was, as a colophon states, a tablet of sixty lines, and though somewhat broken at one end, not more than five whole lines are lost, though parts of several are fragmentary. The language of the tablet is Sumerian. It reads as follows:—

OBVERSE

har-sag-an-ki-bi-do-ge
 erim-an-ni dingir-dingir a-nun-na im-tur-ne-eš.a-ba
 mu ¹ezinu nu-in-da-má-da ub-še-da-an-dug-ga
 kalam-mu ²lik-ku nu-in-da-an-dim-ma-ai
 5 ³lik-ku-ra temen nu-mu-na-sig-ga-āš
 tuš-up-pi-a ra¹¹.ub-šar-ra
 ar nu-mé-a-am numun šar-ra
 pu-e-x¹².a-bi nu-in-tu-ud
 anše-ra¹³ bir-ēš-bi nu-in-tu-ud
 10 mu ⁴ezinu utul-umuna-bi apin
⁵g-nun-na dingir gal-gal e-ne nu-mu-un-zu-ta-am
 še-šeš erim-usu-am nu-gál-la-am
 še-šeš erim-enianu-am nu-gál-la-am
 še-tur-tur še-kur-ra še-ē-sal-gal-la nu-gál-la-am
 15 šu-gor tuš-tuš-bi nu-gál-la-am
 lik-ku nu-še-tur kā nu-il
 en ⁶nin-tu en kal-kal nu-in-tu-ud
⁷ug¹⁴ maš tam-ma maš dū-da ē
 nam-lū un-zu erim-nun-a gā-e-ne
 20 gar-kū-šā-bi mu-un-zu-uš-am
 tug-gi-tuš-tuš-bi nu-mu-un-zu-uš-am
 uku ⁸gi-a-na-dur-bi mu-ē

¹ "ra = *ta*, 'not'; cf. *Origin of Babylonian Writing*, no. 287. It is often employed in the Stele of Vultures in this sense: see for example col. xxi, 2, 3, *na-ri-a-bi da-ra-pa-du*, 'this stele one shall not break.'

² The sign *x* is no. 806 in *The Origin of Babylonian Writing*. Its values are undetermined.

³ *gale-ra*, for *anše-bur-ra*. *bur* was omitted by the scribe.

⁴ In Semitic Shamash, the sun-god.

By making a dwelling a kindred was formed.
 To the gardens they brought irrigation;
 25 On that day their [gardens] sprouted (†).
 Trees mountain and country.

REVERSE

Father Enlil (†)
 standing grain (†)
 for mankind
 creation of Entu

5 Father Enlil,
 Duazagga, the way of the gods
 Duazagga, the brilliant, for my god I guard (†)
 Entu and Enlil with an incantation
 A dwelling for Ashnan from out of Duazagga I will [make
 for thee (†)].

10 Two thirds of the fold perished (†);
 His plants for food he created for them;
 Ashnan rained on the field for them;
 The moist (†) wind and the fiery storm-cloud he created for
 them.
 Two thirds of the fold stood;

15 For the shepherd of the fold joy was disturbed.
 The house of rushes did not stand;
 From Duazagga (†) joy departed.
 From his dwelling, a lofty height, his boat
 Descended; from heaven he came

20 To the dwelling of Ashnan; the scepter he brought forth to
 them;
 His brilliant city he raised up, he appointed for them;
 The reed-country he planted; he appointed for them;
 The falling rain the hollows caught for them;
 A dwelling-place was their land; food made men multiply;

25 Prosperity entered the land; it caused them to become a
 multitude.
 He brought to the hand of man the scepter of command.

² *du-el-uzag-ga* is doubtless a variant spelling of *du-uzag-ga*. The sign of introduces an additional word for brightness, thus emphasizing *uzag*.

tuš-gim-ka ba-[ni]-in-ib	ušbar						
a-šar-šar-ra	im-gú-gú-ne						
25 ud-ba-ki dar-	r]a-e-n[e						
giš-bi dul	bi-kur-šar						
gub (?)	dul (?)	bi					
		bi					
		bi					

REVERSE

5 a-a ⁴ e]n-[lil							
	na-ši-a						
nam-lu-ge							
	ba ⁴ en-tu-ge						
10 5 a-a ⁴ en-lil							
dù-azag-ga šid-da dingir							
dù-azag-ga laš-ge-a dingir-ma-da-ra ab-u[ru							
⁴ en-tu ⁴ en-lil-bi dù-azag-ga-ra n[e							
du ⁴ ezinu-bi dù-azag-ta im-ma-da-r[ar-ru							
15 šanabi-e amaš-a im-ma-ab-hab-							
ú-bi e-gar-ra-ra mu-un-a-ba-e-ne							
⁴ ezinu yan-e mu-un-im-i-am-ne							
lil-apin uraš-laš-bi mu-un-a-ba-e-ne							
20 šanabi amaš-a-na gub-ba-ni							
25 sib-amaš-a ši-li dù-dú-a							
gi-li-eš nam-na-gub-ba-ni							
dù- ⁴ el ¹² -azag-ga ši-li-il šub-am							
ga-ni-la sag-gi-il mà-ni							
ib-gál an-na-ta tum-tum-a-ne							
25 x ¹³ kalam-ma né-gig mu-un-ne-gál meš							
ab-a-tum-ra da-ki uš-ir a-ḥat-mé							

¹² kalam-ma gi-šag-gal, literally 'the land, reeds are in the midst,' a very appropriate description of Babylonia.

¹³ The sign transcribed x is no. 241 in *The Origin of Babylonian Writing*. It has the meaning 'favor.' I have rendered it somewhat freely 'prosperity.'

The lord caused them to be and they came into existence,
Companions calling them, with a man his wife he made
them dwell.

At night as fitting companions they are together.

30 (sixty lines).

This text clearly gives us a new myth of the creation of man and the origin of civilization. It tells how the assembly of gods entered the mountain of heaven and earth, and how, because there was no vegetation on the earth, the gods held a consultation. At this point a relatively long statement of the non-existence of the chief features of agricultural civilization is introduced. In such statements Babylonian poets took especial delight. Three of the accounts of creation previously known contain such statements, and two of them are of considerable extent. At the end of this statement, you will remember, it is said that 'with Nintu the lord had not brought forth men.' Ug, the lion god, who was, as a later syllabary explains, Shamash, first came forth to plan. It is then sententiously stated:

Mankind he planned; many men were brought forth.

The verb for 'planned' is *zu*, which also means 'to know,' as in Genesis 4.1. Taken in connection with the previous statement that 'with Nintu the lord had not brought forth men' and with the following statement that 'many men were brought forth,' it means that Ug and Nintu became the divine parents of men.

It is further stated that

Food and sleep he planned for them;
Clothing and dwellings he did not plan for them.

The lines that follow describe how men made reed huts such as are still found in the Babylonian marsh-lands, and how agriculture was begun. Here the obverse is concluded.

At the beginning of the reverse several lines are fragmentary. From the parts that remain it appears that some god is addressing Enlil. In this fragmentary address Duazagga, the heavenly ocean, is described as 'the way of the gods'—perhaps an allusion to the Milky Way. It would seem that all was not going well with men on the earth, so the god that is speaking proposes to form a dwelling for Ashnan, the god of Agriculture, outside of Duazagga. Apparently from what follows this new dwelling was upon the earth. The conditions were such that two-thirds

u-mu-un mu-ne-eš-ib-gál mu-da-an-gál-li-eš-
man-na gu-ne za¹⁸-ki dam-ne ne-ba-an-gub-eš-a

gig-bi-ir¹⁹ bar-a-gar hat-mé-eš

30 LX 3u-3i LX.

of the fold perished; whereupon Ashman created plants and in addition caused it to rain on the earth. He created the moist cloud and the storm cloud. But after that the violent rains were destructive. His measures were helpful, but not sufficiently helpful; still one-third of the fold perished and the houses of rushes were swept away. The point of view of the text here is similar to the account of the creation discovered by Dr. Poebel; it mingles with the story of creation, not indeed the story of a flood, but one of destructive storms. Then a god (Enlil!) came down from his heavenly to his earthly dwelling and inaugurated city-civilization—cities as the elevated and fortified dwellings of an agricultural people. Conditions were thus made secure, and men could then multiply.

Several expressions toward the end of the document remind one of expressions in the early chapters of the Book of Genesis. Thus

The lord caused them to be and they came into existence
(ummu mu-ne-eš-ib-gál mu-da-an-gál-li-eš)

reminds us of Gen. 1.3: 'God said, Let there be light and there was light.' Again: 'Companions calling them, with a man his wife he made them dwell,' recalls Gen. 2.18: 'It is not good that the man should be alone; I will make a helpmeet for him,' and Gen. 2.24: 'Therefore shall a man leave his father and his mother and shall cleave unto his wife.' 'At night as fitting companions they are together,' is another way of saying as Gen. 2.23 does, 'they shall be one flesh.' The statements: 'The scepter he brought forth to them,' and 'He brought to the hand of man the scepter of command,' recall Gen. 1.28, where God gives man dominion over all lower orders of life.

The discovery of this text, which, as the palaeography shows,

¹⁸ za = amila, see *Origin of Babylonian Writing*, no. 522¹, and Delitzsch, *Sumerisches Glossar*, p. 218.

¹⁹ gig-bi-ir, literally 'in their night.'

belongs to the Cassite period or the First Dynasty of Babylon, adds emphasis to the fondness of the Babylonians for giving expression to their religious ideas through myths of creation, which they employed to a greater degree and in a greater variety of ways than any other people of the ancient East.

I have hitherto spoken only of literary expressions of the Babylonian religious spirit, because at this distance it is upon these that we must mainly depend for our knowledge. It should however be noted in conclusion that, as in all the rest of the ancient world, the whole organized life of Babylonia was an expression of its religious spirit. Kings consulted the gods before entering upon any great undertaking. At the dawn of Babylonian history Eanatum sought the will of Ningirsu before undertaking his war with Umma, and during the last reigns of the Assyrian kingdom Esarhaddon sought his oracles, and the seers of Ashurbanipal had their dreams such as that in which the goddess Ishtar revealed herself and her will at the river Ididi. The Bronze Gates of Balawat show us that an army did not cross a river without first propitiating its god by sacrifice. In the code of Hammurapi it is taken for granted that an oath in the presence of a god is sufficient to render a man's word trustworthy, even when it cannot be corroborated by witnesses. Evil spirits as well as good left their impress on life and institutions. Demons of sickness and misfortune were driven away by incantations and ceremonies. It is quite evident that men lived in a vivid consciousness of the supernatural. The type of religion that Babylonian life expressed was vigorous and natural, if sometimes crude. That revealed in Babylonia was gentler and more humane than that in Assyria, but both partook of those human frailties that are prominent in early men and are not altogether absent from our modern Christian world. If the code of Hammurapi betrays a particular fondness for the death penalty, so did English law in the days of Cromwell. If Assyrian wars make us shudder with the tales of frightfulness over which her monarchs gloated, there are at least some in our own time who could scarcely cast a stone at her. Through both the literature and life of Babylonia and Assyria we behold one of the most important of the ancient nations feeling after God, and giving us a most instructive expression, if not one of the most important, of the religious spirit.

TWO JEWISH AMULETS IN THE UNITED STATES NATIONAL MUSEUM*

I. M. CASANOWICZ
UNITED STATES NATIONAL MUSEUM

I

An amulet for the protection of Daniel, son of Berakah, against evil spirits, sickness, the evil eye and magic. Manuscript written on vellum, measuring 14½ by 6½ inches. From Tunis, North Africa. The amulet is a sort of palimpsest, written upon the erasures of what was likewise an amulet, to judge from the traces of the script and figures still discernible. But the present text also seems subsequently to have been used by, or intended for, another person, as the name of the present client and a few other words are written in a different hand from the rest of the writing on erased places. The larger part of the manuscript is fitted out with various devices and figures, scriptural passages and mystical names; the invocation or conjuration proper, written in smaller script than the rest, occupies a comparatively small space at the bottom.

On top **סְנִי וּסְנִסְנִי וּסְמִנְגָּלָף** for which see *JAOS* 36. 158. Underneath in the center, a square inscribed with **אֱלֹהָה אֱלֹהָה** and **יְהֹוָה**, each written in the regular and reversed order. On the sides of the square are four of the 72 three-lettered names of God, derived from Ex. 14. 19-21 (*ib.* p. 155). To the right of the square, 'Thou shalt not suffer a sorceress to live' (Ex. 22. 18) in six permutations; to the left, 22 (corresponding to the number of letters in the Hebrew alphabet!) three-lettered mystical names, followed by Gen. 49. 18, 'I wait for thy help, O JHVH,' and the initials of the doxology, 'Blessed be the name of his glorious Kingdom for ever.'

The second division is marked off on each of the four corners by the words **אֲנָקְרָם פָּסָרָם פָּסָרָם רְזִינְסִים** for which see *JAOS* 36. 158. In the center, Psalm 67, written in form of the seven-branched candlestick (*menorah*), with the divine names

* For a general survey of the collection of Jewish amulets in the National Museum see *JAOS* 36. 154 ff.

אָדָנִי אָחָתִי יְהוָה שְׁדִי, each preceded by לְאָ, on the sides of the shaft. To both sides of the *menorah*, Ps. 90, 17-91, 5 and Deut. 6, 4-9 intertwined, i. e., alternating word by word from either passage. On the left side is read underneath, 'And blue and purple and scarlet and fine linen and goats' hair' (Ex. 25, 5), quoted on account of לְאָרָבָן, which is written in larger letters than the rest and marked as an acrostic, namely of the angelic names, Uriel, Rafael, Gabriel, Michael and Nuriel, followed by the words, 'O living God, deliver!' Under the *menorah* is read, 'And all the people of the earth will see that thou art called by the name of JHVH and will fear thee' (Deut. 28, 10), and under it, 'Thou Daniel, son of Berakah, mayest be blessed . . . and be preserved from all evil accidents.'

The third division consists of a square which encloses other smaller squares and other figures, and is divided into two compartments by the word אָנָּה לְרָדָן, an amalgamation of אָהָתִי and לְאָ, one of the 72 three-lettered names of God. The square is surrounded by an inscription which begins at the top of the right side with a repetition of Deut. 28, 10: 'Thou Daniel, son of Berakah'; 'And JHVH will take away from thee all sickness, and he will put none of the evil diseases of Egypt, which thou knowest, upon thee, but will lay them upon all them that hate thee' (Deut. 7, 15); לְקִי (initials of Gen. 49, 18): אָמֵן נָצֵחַ סָלָחַ וְעָדָן אָנָּסָן. Within the square there are in the upper part three small squares. Those in the two corners are inscribed with יְהוָה אָדָנִי, and בְּרוּחַ in various permutations. The middle one encloses a sort of rhomboid which again holds a small square. This triple figure contains the words, יְהוָה הַרְשָׁעָה ('O JHVH help!'); וְזַקְנָתָךְ (doubtless erroneously for וְזַקְנָתְךָ, for which see JAOS 36, 159); שְׁדִי יְהוָה ('Yah exalt!'); In the corners of the 'rhomboid,' לְבָן אָוָן, and around its sides the angelic names, Duriel, Gadiel, Berakiel and Akathriel, with נָן above each. In the lower part there are on either side squares of three by thirteen lines each. The first and third oblong lines contain Ex. 15, 11, 'Who is like unto thee, JHVH, glorious in holiness, fearful in praises, doing wonders.' The middle line has a series of disconnected letters, probably intended to form in combination with the letters above and below 26 three-lettered mystical names corresponding to the numerical value of תְּהִלָּה.



I. AMULET ON VELLUM FOR THE PROTECTION OF DANIEL,
SON OF BEKAAH. TUKIS, NORTH AFRICA

In the middle is an awkwardly drawn 'Shield of David,' inscribed, (פָּנָן שְׁמַיָּא דְּעַלְמֵן לְהַצְלָה מְעָה (כְּעָן הָרָעָן) 'Salvation, or healing, from God of the world,' for the delivery from the evil eyes, and from magic, and from every evil disease. Amen. Selah.') In the angles in סִמְאָן סְרָנָא,² and רַבְּתָן, טַבְּתָן, טַבְּתָן changed positions.

The invocation is again enclosed in an inscription. The first six words of the upper line seem to be deformations of foreign words; the next two are two of the 72 three-lettered names; the rest are amalgamations of 'יהוה' with the 14 triads of the aerostics of the prayer of Nehunya ben Ha-Kanah (for which see *JAOS* 36, 159, n. 13).

THE INVOCATION

- 1 בְּנֵקֶשָׁה מִכֶּס אַתָּה כְּלָאֵיכָא קְרִיְשָׁא דְּקִמְיָן קְדָם אֱלֹהָא
רְבָא יְהוָה מְכָרֵךְ בְּשֵׁם מִיכָּאֵל נָרִיאֵל זְרִקְיָאֵל פּוֹאֵל
קְדוֹדְנִיאֵל שְׁנִינִיאֵל
- 2 רְפָאֵל וּבְשֵׁם שְׁנִינָה לְמִשְׁאָה בְּסִינִי וּבְשֵׁם שְׁקָרְעָא אֶת הַם
לִיבָּקְרָעִים וּבְשֵׁם שְׁנָתָן תּוֹרָה לִיְשָׁרָאֵל וּבְשֵׁם שְׁנִינָה
לְאַלְיהָוָה בְּכַרְמָלִי וּבְשֵׁם
- 3 שְׁרִיפָא הַמִּס עַל יְדֵי אַלְיָשָׁע וּבְשֵׁם שְׁהַצִּיל אֶת דְּנִיאָל
סְנָבָא אֲרִיוֹת וְלֹא חְבּוֹתָה בְּן תְּצִילוֹ וְתְּרִפָּאָו וְתְּגִנָּנוֹ וְתְּשִׁפְרוֹ
לְדְנִיאָל כָּרָב
- 4 בְּרָכָה הַנְּקָעָה וְהַנְּשָׁא קְמִיעָה עַלְיוֹ מִמְּנִי תּוֹתֵךְ דְּפָרָחִין בֵּין
רְקִיעָא לְאָרָעָא וּמְרָחִין בַּיְשָׁין וּמְלִילָה וּמְמִיקָּן וּמְפָחָד
לִילָּה וּמְחָלָאִים רָעִים וּמְכָל פְּגָעִים
- 5 רָעִים וּמְכָל מִינִי פּוֹרָעָנִוּת בְּשֵׁם יוֹחָק כִּי כְּלָאֵיכָו יְצָה לְךָ
וְתְּשִׁמְרוֹהוּ מְכָל מִקּוֹרֹת מִיאָוִין וּמְכָל מִינִי כִּישְׁוּפִים בְּשֵׁם
מָאִי שְׁמַיָּאֵל
- 6 סּוֹסִיא בְּנִיהָה וְתְּצִילוֹ וְהַשְּׁמָרוֹ וְתְּשִׁרְוֹ וְהַפְּרוֹ מְעֵנָא בַּיְשָׁא
וּמְכָל מְרָעָן בַּיְשָׁין אֶלָּא תְּנַהּוּ לְחַן וְלְחַסְד וְלְחַחְטָם
כְּעִינֵיכֶם
- 7 וּכְעִינִי כָּל רֹאֵז בְּשֵׁם חַנִּיאֵל חַסְדִּיאֵל רַחֲמִיאֵל וּבְכָחֵ הַשְּׁמָם
הַוֹּצֵא מְפָסָק וְנֵחַ מֵזָא חַן כְּעִינִי יְהוָה וְאַתָּם הַמְלָאָכִים
הַמְכּוֹנִים

8 על אוצרות השמיים והברכה חפתחו את אוצרותיכם
והשביעו והישפיעו שפע מטווחתיכם בשם נח השם היוצא
9 ספוק יפתח יהוה לך את אוצרות הטוב את השמיים בשם
תג'יעת העצ'יש א'א' ס'ס' אנדש קו'ז צמדכ'ר
10 קרי'ת הקרא'ש'im במכוכבו קו'ז' בר.

TRANSLATION

- 1 I pray of you, ye holy angels,¹ who stand before the great God,² JHVH, who is blessed, in the name of Michael, Nuriel, Sadriel, Puel, Kadarniel, Shamshiel,
- 2 Rafael. And in the name by which he was revealed to Moses on Sinai; and in the name by which he cut the sea into twelve pieces³; and in the name by which he gave the Torah to Israel; and in the name by which he was revealed to Elijah on Carmel⁴; and in the name
- 3 by which he healed the water through Elisha⁵; and in the name by which he resened Daniel from the den of lions so that they did not destroy him⁶—so may you deliver and heal and shield and preserve Daniel, son
- 4 of Berakah, the bearer of the amulet upon him, from the kinds of . . .⁷ that flit about between heaven and earth; and from evil spirits; and from Liliths; and from injurious spirits; and from the terror of the night⁸; and from evil diseases; and from all evil plagues;
- 5 and from all kinds of visitations, in the name of YUHK,
"For he shall give his angels charge over thee."⁹ And ye may guard him against all sinister¹⁰ accidents, and all kinds of magic, in the name of Ma'ni Shamiel
- 6 So(u)sya, Banyah.¹¹ And may you deliver and preserve and loosen and free him from the evil eye and from all evil afflictions; but render him an object of favor and grace and compassion in your eyes
- 7 and in the eyes of all who see him, in the name of Hanniel, Hasdiel, Rahamiel; and by the power of the name which issues from the verse, 'And Noah found favor in the eyes of JHVH.' And ye the angels, who are set
- 8 over the treasures of heaven and blessing, may you open your treasures and sate and lavish abundance from your bounty in the name of the power of the name which issues

9 from the verse, 'JHVL will open unto thee his good treasure, the heaven.' In the name of TG'S, T'SS. Amen, Amen, Amen, Selah, Selah, Selah. ANDS. JHVL. SMARKD.¹⁴

10 Most Holy, Our God JHVL.¹⁵ BD.

NOTES

¹ אֱלֹהִים on account of the following יְהֹוָה here = God. Comp. for this meaning of heaven Jewish Enc. s. v. 6. 299, and James A. Montgomery, *Aramaic Incantation Texts from Nippur*, Philadelphia, 1913, 11. 2 (p. 170); 18. 1 (p. 193). For the combination, 'God of the worlds' comp. Isa. 26. 4; צְבָא עָלָהָם and רַבָּן כָּל הָעָם in the Jewish liturgy.

² Cf. **כרכן** Montgomery, op. cit., 7, 11 (p. 146) and glossary, s. v.

⁸ Cf. Montgomery, *op. cit.* 8, 14 (p. 154) and (*in malam partem = 'aucti'*) 4, 1 (p. 132).

¹⁰ Cf. Montgomery, *op. cit.* 7, 4 (p. 145).

⁴ Corresponding to the Twelve Tribes, cf. Rashi to Ps. 136. 13; Ex. Midr. R. 24. 1, and Deut. Midr. R. 11. 9.

"1 K. 18, 12.

J. K. 13. 11

* Dan. 6, 23.—The appeal by the manifestations of God's power and wondrous help in critical events through Israel's history is also found in the prayers recited on fast days and during the penitential seasons. Montgomery, *op. cit.* p. 64, quotes parallels from Babylonian and Egyptian magical incantations.

* יְלָמִים unknown. Etymologically it might be explained to mean 'lower ones,' from יְלָמָה but the context points to some kind of winged beings who traverse the spaces between heaven and earth. Wings, however, are also attributed to the Shedim and Lālin, cf. JAOS 36, 166, n. 46.

— Ps. 91. 5. Targ. ad loc. gives this passage (as the rest of the psalm) a demonistic meaning: **בְּנֵי־יְהוָה כְּבָנֵי־תָּאָתָּה**.

⁴⁴ P. 21, 112: "EW" is formed of the initial letters of the four words

but **בְּקָרִים** is difficult to explain. Can it be a formation from **בְּקָרָא**, 'enraged, *temeritius, sinister*'?

¹⁴ Perhaps names of 'master magicians' or 'master conjurors,' like Abbahu, Joshua b. Peranya, Bar Mesosin, etc., in the incantation bowls, cf. Montgomery, op. cit. n. 24, 99, 112 f. etc.

²⁴ See *JAOA* 36, 159.

* See 1408 36 155.

Underneath the invocation is a small crudely drawn 'shield of David' inscribed with יהוה, אֶחָדָיְל, and זָכָרָה, and a sort of tree or branch, placed upside down. The latter may represent the 'magic bough' depicted on one of the Nippur

bowls and referred to by Montgomery, *op. cit.* p. 55.—It may be remarked in general that this amulet contains many echoes of the Nippur incantation texts published by Professor Montgomery. To the cases noticed in the notes above may be added **אָמֵן שְׁמַיָּהּ בְּנֵי שְׁמַיָּהּ**, found only on this amulet of the Museum collection and one of the stock ejaculations on the Nippur bowls. Another noticeable feature of this amulet is that the appeal in the invocation is not addressed to God, enumerating his names and then those of some angels, but to the 'holy angels' and reversing the order of the names, giving to those of the angels the precedence over those of JHVH. May not this amulet represent one of the earlier stages of the transition from the predominantly eclectic and syncretistic use of magic to the more pronouncedly Judaic form?

II

The second amulet, likewise a sort of parchment palimpsest, measuring $13\frac{1}{2}$ by $8\frac{1}{2}$ inches, and coming from Tunis, has two invocations, which are separated by the candlestick formed of Psalm 67. Both have blanks for insertion of the name of the client or patient, and the one to the right lacks the usual conclusion. The whole is framed by two lines of inscription. The outer one, beginning at the top on the left side, consists of forty-two repetitions of the name of **בָּנָרִיאָל**, prefixed with the forty-two acrostics of the prayer of Nehunya, while above is the quotation from Deut. 28. 10, closing with the names **שָׁמָרְךָ** and **סְנַרְלָפָן**. The latter is explained as = Σινάθλφος, 'co-brother' or 'twin-brother,' namely of Metatron. In Hag. 13^b Sandalfon is spoken of as taller than his fellow angels by a distance of 500 years' journey, and when standing on earth reaching with his head the Hayyoth of the Merkabah-throne where he binds wreaths for his master. The inner inscription starts on the right side beneath the enclosure of the zigzag figure and is composed of Biblical passages, namely, Deut. 7. 15; Ps. 46. 12: 'JHVH Sebaoth is with us, a high tower is the God of Jacob. Selah'; Ps. 20. 10: 'JHVH help the king, he may answer us on the day we call,' and the Aaronite blessing, Num. 6. 24-27, interspersed with the mystical words **פָסָחָם אַנְקָדָם**, etc.

The zigzag lines above and the parallel lines which enclose them contain Exod. 14. 19-21, the three verses which constitute

the great 72-lettered name of God and from which the 72 three-lettered names of God are constructed: 'And the angel of God, that went before the camp of Israel, removed and went behind them; and the pillar of cloud removed from before them, and stood behind them. And it came between the camp of Egypt and the camp of Israel; and there was the cloud and the darkness, yet gave it light by night; and the one came not near the other all the night. And Moses stretched out his hand over the sea; and JHVH caused the sea to go back by a strong east wind all the night, and made the sea dry land and the waters were divided.' Further, Exod. 13. 21: 'And JHVH went before them by day in a pillar of cloud to lead them by the way, and by night in a pillar of fire to give them light, that they might go by day and by night'; Ps. 124. 8: 'Our help is in the name of JHVH who made heaven and earth,' and a repetition of the priestly blessing, Num. 6. 24-26.—Between the zigzag lines are the first fourteen (to correspond to the fourteen triads of the acrostics of the prayer of Nehunya!) three-lettered names of God derived from Exod. 14. 19-21, closing on the left side with בָּצָפָץ which by the at-bsh alphabet is = יְהֹוָה.

Below, in the middle, in two concentric circles are arranged the fourteen triads of the forty-two acrostics of the prayer of Nehunya with יְהֹוָה between each and at the end. To either side are squares. In the one to the right the upper three rows are filled out with יְהֹוָה and its permutations, while the fourth row has זְהֹן בְּכֶרֶת יְהֹה. and וְאֵתָה. the square to the left has nine three-lettered names out of ten derived from Gen. 46. 4: אָנָכִי אָרֵד עַמְקָם כָּדִימָה וְאָגָכִי אַעֲלָךְ 'I will go down with thee into Egypt and I will surely bring thee up again,' which, according to Schwab, *Vocabulaire*, p. 61, are recited to avoid danger; the empty eighth cell should have נְעַנְעָנָה. The six last cells are inscribed with שְׁדָה in six permutations. Under the square, אַדְרִירָה, for which see JAOS 36. 158.

THE INVOCATION TO THE RIGHT

1	בָּשָׁם יְהֹוָה אֶלְקָי יִשְׂרָאֵל יַשְׁבֵּת
2	הַכְּרוּבִים אֲשֶׁר מִפְחָדו יִנוֹרָוּ
3	אַלְים וַיַּרְעָשׂ אָוֹפְנִים וְכָל שְׁרִי

31	אָבָרְיוֹ לֹא בְּרָאָשׁוֹ וְלֹא בְּכָרָאָתָּה עַנְיוֹ . . . "	4
30	נִקְזָעַ בְּשָׁוֹם אָבָרְמָתָה מְרֻמָּתָה	5
29	הַרְעִידָוָה וְלֹא הַרְעִיעָשׂוּ וְלֹא הַשְׁחִיתָוּ וְלֹא הַפְּסִידָוּ	6
28	שְׁלָא חַזְקָוּ וְלֹא חַפְחָזָוּ וְלֹא תַּחֲזִיעָוּ וְלֹא	7
27	שְׁמִיחָן וְרָלָא דְ'שׁ "שָׁאַנִי יְודָעַ שְׁכִיחָן וְשָׁאַנִי אִישׁ"	8
26	קְבָרָה" וְמַרְחָה מְעֵיאָה וְשְׁלִילְתָא" וְעַל כָּל שְׁרִין דְּרִכָּין	9
25	בִּישָׁין וּמוֹיקָן וּמַרְחָה אָבָרְיָה" וּמַרְחָה קְטָלָה" וּמַרְחָה	10
24	מְלָכָא דְּשָׁדִי וְעַל כָּל חַיְילָה וְעַל כָּל רָחִין	11
23	בַּת מְחַלָּתָה וְעַל כָּל כָּת דִּילָךְ וְעַלְךָ קְפָקְפָעָה	12
22	תְּעַלְךָ זְמָמָתָה וְעַל כָּל כָּת דִּילָךְ וְעַלְךָ אֲנָרָת	13
21	יְוָהָצְצָבִירָן וְעַלְךָ לְיִלָּחָה וְעַל כָּל כָּת רְדִילָךְ	14
20	מִשְׁבָּעָי בְּכָח סְנִי וּסְנִסְנִי וּסְכָנְנָלָף וּבְשָׁם	15
19	וּבְטִיט וּבְכְפָרָשָׁת דְּרָכָים" עַל הַכְּלָא נָגִי	16
18	וּבְכְרָחָצָאות וּבְאָנְגָמִים וּבְבָאָרוֹת וּבְכְחָלִים	17
17	וּבְכְעָינָות וּבְאִילָנוֹת וּבְפָנוֹת הַבַּיִת וּבְכְרָפְשָׁת	18
16	שְׁדָר וּשְׁוֹרָה הַשּׁוֹכְנִים בְּבָתִים וּבְחָצְרוֹת וּבְאָפִיקִים	19
15	בְּסָתָר וּבְגַלְלָיו בָּיּוֹם וּבְלִילָה וּמְכָל	20
14	רְחוּנִים אַרְצִים וּסְמִינִים" הַרְבָּעִים	21
13	רְעוּה וּמִשְׁרָן לִילִין צְפִירָן וּטְהָרִירָן	22
12	וּבְכָלהָ וּהַרְנוֹה וּהַתְּעִשָּׂה וּכְבוֹד רָהָה	23
11	וּמְכָל פְּחָד וְאַיְכָה וְצָעֵר וְנוֹקֵר וְרִיפָיָה	24
10	וּנְאָמְנִים וּמְכָל פָּאוֹרָעוֹת קַשְׁוֹת וּדְרֹוֹת	25
9	נִשְׁמָר נִקְזָעַ מְכָל חַלָּאִים רְעִים	26
8	וּמְלָאָכוֹ רְפָאָל וּמִשְׁרָתוֹ צְדָקָה שִׁיהְיָה	27
7	כְּכָח מְלָאָךְ וְהַיּוֹם שְׁמָלוֹ אַרְיָה	28
6	וּרְפָאָה וּהַצְלָה נִקְזָעַ וּנְשָׁאָה קְמִיעַ וְהַעֲלֵי	29
5	כְּוֹתֵב אַנְיָעַ וְהַשְׁמִירָה שְׁמִירָה	30
4	מְרַכְבָּה לְפָנָיו כְּרָעִים וּמְשַׁתְּחִוִּים	31

TRANSLATION

- 1 In the name of JHVH, the God of Israel, who dwelleth
- 2 among the Cherubim, before whose awfulness the angels (or gods) fear,
- 3 and the Ofanim (wheels) tremble, and all the princes

4 of the Merkabah (chariot)² kneel down and prostrate themselves before him—
5 I write this amulet for the protection
6 and healing and delivery of the bearer of this amulet upon
him.
7 By the power of the angel of this day, whose constellation
is Leo,
8 and his [ruling] angel is Rafael, and his servitor is Jupiter,³
that
9 the bearer of this amulet be guarded against all evil and
10 enduring diseases, and against all severe and evil vicissi-
tudes
11 and against any fear, terror, anguish, injury, and feebleness,
12 and panic, and upsetting, and trembling, and depression of
an evil
13 spirit, and against Shedit, Lilin, morning demons, and mid-
day demons,⁴
14 whether they be evil [demons] of the winds, the earth, or
the waters,⁵
15 hidden or revealed, by day or by night; and
16 against any male Shed and female Shed who dwell in houses,
and in courtyards, and in channels,
17 and in bath-houses, and in pools, and in wells, and in brooks,
18 and in springs, and in trees, and in the corners of the
house, and in mire
19 and dirt, and on the cross-roads.⁶—All of them
20 I adjure by the power of Sanuy and Sansanuy and Saman-
galuf, and in the name
21 of Yu'ahassbirun, and thee Lilith and thy entire band,
22 and thee Zumzamith and thy entire band, and thee Agrath,
23 daughter of Mahlath,⁷ and thy entire band, and thee Kaf-
kapu'a,⁸
24 king of the Shedit, and his entire host, and all evil
25 spirits, and injuring spirits. And against the spirit of
. . .⁹ and the spirit of a slain man¹⁰ (†), and the spirit
26 of the grave,¹¹ and the spirit of . . . and of . . .¹² and all
the Shedit whose names
27 are remembered or whose names are not remembered,¹³ whose
names I know or no man [knows]¹⁴—

28 that ye shall not injure, and not frighten, and not disturb,
and not
29 terrorize, and not upset, and not destroy, and not harm
30 the bearer of this amulet upon him in any member
of his two hundred forty-eight¹³
31 members, neither in his head nor in his eyesight . . .¹⁴

NOTES

¹³ The פ (or פ) is often substituted for the פ in the name of God in later Jewish writings; cf. Jewish Esc. 9, 164.

¹⁴ The mystical interpretation of the description of the chariot with its constituent parts, the wheels (*ofanim*), beasts (*hayyot*), in Ezek. 1 and 10, forms under the name of 'Ma'aseh Merkabah' a very important part of the secret lore in both the Talmud and the Kabbalah.

¹⁵ On astrological elements in Jewish amulets see JAOS 36, 156.

¹⁶ פְּרִירִים from פָּרִיר, 'to cleanse,' then 'to brighten' (as a result of cleansing); hence Targ. to Ps. 91, 6 renders פְּרִירִים by פְּרִירִים, 'the day being at noontime at its brightest.' Both פְּרִירִים (from פָּרִיר 'morning') and פְּרִירִים, for morning and midday demons, respectively, are found in Targ. to Cant. 4, 6; cf. also Berak. 2a and Yoma 69a.

¹⁷ Spirits who cause storms, earthquakes, and floods; see Jewish Esc. 4, 516. Cf. פְּרִירִים פְּרִירִים, 27, 577 in Montgomery, Aramaic Incantation Texts, p. 75; 17, 3 (p. 190); 29, 7 (p. 218).

¹⁸ On the abodes of demons see Jewish Esc. 4, 516.—Among the trees the palm tree seems to have been considered as a favorite rendezvous of spirits, Ps. 111a. So also are the cross-roads 'a resort of spirits'; He嚮te is often found there, and in the Testament of Solomon . . . the demon Envy says, 'In the cross-ways also I have my services to render,' R. Campbell Thompson, Semitic Magic, its Origin and Development, p. 200, n. 4; cf. J. G. Frazer, The Golden Bough, 3¹, 40, and Esc. Bibl. s. v. 'Medicine,' 3, 3008.

¹⁹ See JAOS 36, 167, n. 48.

²⁰ Elsewhere Asmodai (Asmodeus) or Samael is named as prince of the demonic hosts.

²¹ פְּרִיר, whether derived from פָּרִיר, 'lively,' or from פָּרִיר, 'red,' it does not fit into the context.

²² The immediately following רְשָׁעָה קְבָרָה would suggest the taking of קְבָרָה in the passive sense, the spirit of a murdered man who finds no rest and annoys people on earth, a belief widely spread. But perhaps it is more correct to take the word in the active sense, a murderous spirit, for which cf. Montgomery, op. cit. 36, 2 (p. 233), קְמָתָה כָּתָה ק, 'murderess, daughter of a murderer.'

²³ For the conception of graveyards as abodes of spirits cf. Hag. 3¹ and Sanh. 65a.

²⁴ פְּרִירִים . . . פְּרִירִים which cannot in this connection be connected with פָּרִיר, 'intestines' and פָּרִיר, 'ruler.'



II. DOUBLE AMULET ON PARCHMENT WITH BLANKS FOR INSERTION OF THE NAME OF A CLIENT. TUNIS, NORTH AFRICA.

¹¹ What Montgomery terms "blanket formulas," so as not to omit any agency, cf. *op. cit.* 14, 6 (p. 183); 29, 9 (p. 218); etc.

¹² Supply וְעַד.

¹³ See *JAOS* 36, 165, n. 24.

¹⁴ The scribe apparently broke off in the middle of his copy, which probably contained the enumeration of the other bodily parts which were to be protected from attack, closing with a prayer that the patient might find grace and favor in the eyes of God and men.

THE INVOCATION TO THE LEFT

1	הִי רצֵן מִלְפְּנֵיךְ יְהוָה אֱלֹהֵינוּ
2	אָכְתֵּי לְמַעַן וּלְמַעַן שְׁטֵךְ הַנְּרוֹלָה
3	הַמּוֹכֵחַ בְּאֶלְוִי שְׁבָותֵי הַקְּרוּשִׁים
4	וְהַנוּרָאִים יְהֹהוּוָה יְהֹלָה יְסִיחָמָה
5	עַהֲלָמָה יְמַהְוָשָׁה יְלַהְלָה יְאַהְבָה
6	כְּהֹרֶתָה יְהֹוּהוָה יְאַהְלָה יְלַהְאָה
7	יְהֹחָתָעָה יְהֹוּלָה יְמַהְבָּה וּלְמַעַן
8	שְׁמַחְתֵּךְ הַקְּרוּשִׁים אֶלְוִי אֶגְלָא
9	אָבְנָה יְהֹקָךְ כָּלָךְ כָּוּ בְּמַכְסָוּ בְּחוּ
10	שְׁתַשְׁכֹּר וְתַצִּיל
11	נִקְזָעַ כְּכָל עַין הַרְעָה וּמַלְשָׁן הַרְעָה
12	וּמְכָל דְּבוּר הַרְעָה וּמְכָל מְרָאִים כִּישֵּׁן
13	וּמְנַכְּפָה וּמְאַסְכָּרָה וּמְנוּילָה וּמְחוּלָה
14	שְׁחוּרָה וּלְבָנָה וּאֲרוֹמָה וּוַיּוֹקָה וּמְכָל
15	תְּרִדְמָת אֲבָרִים וּמְמִיתָה מִשְׁוֹנוֹתָה
16	וּמְמִיהָה פְּתָאָמִיתָה וּמְשִׁטָּות וּמְבָלְבָל כְּחוּ
17	וּמְתַחְמָהָן לְכָבָב וּמְעַילָּךְ וּרְתָת חַיָּעָה וּמְרַמִּינָה
18	רְעוּת וּמְכַזּוּקָה לְבָב וּמְדַרְבָּן לְבָב וּמְרוֹחָק
19	לְבָב וּמְצִיר לְבָב וּמְעַצְבָּן לְבָב בְּשָׁם וּבְכָחָה
20	לְטַבְלָא וּנְחָב שְׁתַשְׁכָּר וְתַצִּיל לְנִקְזָעַ כְּכָבָב
21	רָאַשׁ וּמְחָלָי עַזְן וּמְכַזּוּקָה לְבָב וּמְקַטֵּב וּמְרוּרִי
22	וּמְדַבֵּר וּמְנַפֵּה בְּשָׁם אַדְגָלְבָשׁ קְהַסְמָנָה
23	קְסְטִיאָל קְטִיסְיָאָל וּמְכָל מִינִי קִישְׁוֹרָה וּכְיִשְׁוֹה
24	שְׁבָעָלָם כְּרַכְתִּיב מְכַשְּׁפָה לְאַחֲרָה בְּשָׁם
25	הִיא וּמִצָּא חַן וְשַׁכְלָתָב בְּעַנִּיךְ וּכְעַנִּיךְ כָּל
26	רוֹאֵז כְּרַכְתִּיב וּנוֹחַ מִצָּא חַי בְּעַנִּי יְהֹוָה וּכְרַכְתִּיב

27 וְמֵצָא חֹן וְשָׁכֵל טוֹב בְּעֵינֵי אֱלֹהִים וְאָדָם וְתָהִיה (וּ) 28 לְאַהֲבָה לְחֹן וְלְחַסֵּד וְלְחַסְפִּים בְּעֵינֵךְ וּבְעֵינֵי 29 כָּל רֹאוי בְּשֵׁם אֲהַבְיָאֵל חַנִּיאֵל חַסְדִּיאֵל 30 רַחֲמִיאֵל אָמֵן נַצְחָה סְלָה וְעָד אָרוֹנִיאֵל רְפָאֵל 31 נְכָרִיאֵל מִיכָּאֵל סְמָכִיאֵל עֲזִירִיאֵל זְדָקִיאֵל 32 שְׁעִשְׁיאֵל.

TRANSLATION

1 May it please thee, O JHVH, my God and the God
 2 of my fathers, for thy sake and for the sake of thy great
 3 name
 4 which is crowned with these holy
 5 _____
 6 _____
 7 _____, and for the sake
 8 of these thy holy names 'AGLA¹
 9 AZBUGAH YUHK KLK² KUZU BMUKSZ KUZU.³
 10 That thou mayest guard and deliver
 11 the bearer of this amulet upon him from any evil eye and
 12 from an evil tongue,⁴
 13 and from all evil speech, and from all evil sights,
 14 and from epilepsy, and from croup, and from a running
 15 catarrh,
 16 and from the black sickness (melancholy, or *melanaemia*),
 17 and the white sickness (*leukæmia*), and the red sickness
 18 (jaundice), and the green sickness (biliaryness, or Egyptian
 19 *chlorosis*),
 20 and from any torpor of the limbs (paralysis, or *narcosis*),
 21 and from a strange death,
 22 and a sudden death,⁵ and from folly and confusion of the
 23 brain,
 24 and from stupor of the heart, and from faintness, trembling,
 25 and shock, and from evil
 26 fancies and distress of the heart, and languor of the heart,
 27 and pressure
 28 of the heart, and . . .⁶ of the heart, and sadness of the
 29 heart. In the name and by the power
 30 of LTBLA⁷ WNHB mayest thou guard and protect the
 bearer of this amulet upon him from head-

21 ache, and from eye-sore, and from distresses of the heart,⁹
and from Keteb and Meriri,¹⁰
22 and from pestilence and plague: in the name of SDNLBSH
KHSMGT
23 Kastiel Katsiel. And from any bond¹¹ and magic [that
exist]
24 in the world, as it is written, 'Thou shalt not suffer a sor-
ceress to live,'¹² in
25 the name of HYH. And may he find favor and good under-
standing in thine eyes and in the eyes of all
26 who see him, as it is written, 'And Noah found favor in the
eyes of JHVH'¹³; and is written,
27 'And thou wilt find favor and good understanding in the
eyes of God and man.'¹⁴ And may he be an object
28 of love, favor and grace and compassion in thine eyes and
in the eyes
29 of all who see him; in the name of Ahaniel, Hanniel, Hasdiel,
30 Rahamiel. Amen, enduring forever. Uriel, Rafael,
31 Gabriel, Michael, Samkiel, 'Azriel, Sadkiel,
32 Sha'ashiel.

NOTES

⁹ The names in lines 4 to 7 are composed of the fourteen three-lettered names scattered between the zigzag figure on top of the amulet, inter-linked each with יְהֹוָה.

¹⁰ The initial letters of לְהֹדֵה נָבוֹר לְעֹלָם אָמֵן. 'Thou art mighty for ever O Lord,' the first words of the second prayer of the 'Eighteen Benedic-tions' (*Shemoneh 'Esrach*, or 'Amidah'); also the acrostic of the first words of Gen. 49, 8-11 (Judah of v. 8, as the address, not being counted).

¹¹ Combined of the end letters of Ps. 91, 11.

¹² By ab-gd = יְהֹוָה יְהֹוָה יְהֹוָה.

¹³ In the Talmud the technical term for calumny or slander; here probably of casting an evil spell by some magical formula.

¹⁴ Cf. the petition, 'from sudden death, good Lord deliver us,' in the Litany of the Common Prayer Book.

¹⁵ תְּאַזֵּב. The word is found in plural, Jud. 2, 3; rendered by LXX περιεχει = נְתַרְתָּ (ל), by Targ. יְפִירָא בְּכִירָא. but is most probably to be amended after the parallels in Num. 33, 55 and Josh. 23, 13, into תְּאַזֵּב. 'thorns.'

¹⁶ Already mentioned in line 18.

¹⁷ Both words, without copula, are found in Deut. 32, 24, English versions, 'bitter destruction'; בְּשָׁפָךְ alone, in parallel to תְּאַזֵּב, occurs Is. 28, 2; Hos. 13, 14; and Ps. 91, 6. In the last passage both Targ. and Rashi render both words by 'demon' (שָׁמָן). In rabbinical literature (Pea. 111^b, Num.

R. 12. 5) **דָּבָר** is depicted as a demon calf-headed with revolving goat's horn, an eye in the breast, and body covered with scales, hair, and eyes, who reigns from the seventeenth of Tammuz to the ninth of Ab (the season of national mourning). For a similar monster in Assyrian incantations see Thompson, *Semitic Magic*, p. 63 f.

* **תְּבִזָּבָבָה**. It may mean a psychical or spiritual bond, i. e. the duress caused by a demon or sorcerer (cf. Luke 13. 16), which the juxtaposition of **תְּבִזָּבָבָה** would suggest; or it may refer to bewitchment by tying knots, cf. Montgomery, *op. cit.* 'בְּבִזָּבָבָה' 7. 13 (p. 146), and **תְּבִזָּבָבָה** 34. 10 (p. 231). On the wide-spread practice of sorcery by tying knots see Frazer, *Golden Bough*, I. 392, 397; Thompson, *op. cit.* p. 168 ff.

* Exod. 22. 18.

* Gen. 6. 8.

* Prov. 5. 4.

THE SITE OF CONSTANTINOPLE
A FACTOR OF HISTORICAL VALUE

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For more than 2000 years the leading minds of the world have dreamt of Constantinople. Dreamt of it in visions of splendor as did the Russians of Kief and Smolensk in mid-medieval days when they thought of Tsurigrad—the city of Emperors. Dreamt of it in golden dreams as did the bankers of Venice and Genoa in the twelfth century when they figured that the annual income of Byzantine Emperors exceeded one hundred million dollars. Dreamt of it as did the minstrels of western Europe when they sang of the beauty of Byzantine palaces and the pleasures of life in Byzantium. To account for the magic of the name and for the strength and permanence of the impression it created requires a thorough understanding of the value of its site, and I am attempting to show in the following lines that a large share of Constantinople's greatness and fame was the result of its geographical position. This paper will therefore be confined to a presentation of what might correctly be called a background study.

Were we to liken the world of ancient history to a gigantic spider's web, Constantinople would occupy the center, and the threads radiating outward would represent the far-reaching system of roads leading in every direction from the capital. How different is the relation of Rome and Constantinople to systems of world routes! We are so accustomed to the saying that all roads led to Rome that we forget the truth which was that all roads were made to lead artificially to Rome for a stated period of history, whereas they have always led naturally to Constantinople. Rome was the convenient center for a Mediterranean power. Constantinople on the other hand was the indicated headquarters of authority in the western half of the eastern hemisphere.

It was the hub of a set of land and sea roads which, spoke-like, linked it to the outermost fringe of the inhabited world. The Baltic was reached on the north through the long rivers

flowing on the great plains of Russia. Out of Thrace and its cold mountains the valleys of the Maritsa and Isker led into the Danube furrow which provided a connecting link with the Atlantic on the west. In the east the roads extended as far as the Pacific while to the south they attained the Mediterranean and the Indian Ocean.

The eastern land routes crossed Asia Minor on the north and south. The southern road made use of the winding valley of the Sakaria river to climb upon the tableland. The descent was made at the celebrated Cilician gate, whence a fan of roads led to Egypt and India. This last goal could be reached by land south of the great central salt deserts of Persia, by following the old Median way between Baghdad and Kermanshah and proceeding by Kirman to northwestern India. The northern road usually comprised a watery stretch between Constantinople and Trebizonde. East of this city it passed by Tabriz and Teheran and penetrated Turan, Central Asia, and China or else lost itself by way of Meshed into the mountain tangle of Afghanistan.

To the east Constantinople has always been in touch with the heart of Slavic Russia through the Dnieper valley. The river and its affluents drain an extensive plain which connects the central plateau of Russia with the Podolian upland. Baltic ridges form its natural bulwark on the north. But the easiest outlet leads southwards toward the Black Sea. Hence Varangian adventurers leading flotillas of war galleys drifted inevitably towards the capital. In time these fair-complexioned northerners were drafted by Byzantine emperors into regiments whose boast of being Constantinople's stoutest defenders has never been controverted.

The importance of the penetration of this long river into Russian territory can never be overestimated in the history of civilization. Its head-waters attain the eastern edge of Russia's industrial zone. Its lower course waters the western end of the celebrated Black Soil or Chernozom belt. These facts mean that the river valley is the main artery of communication in Russia's most densely populated sections. There the purest type of Russians known as Little Russians are found. These Slavs are probably the only members of the Russian family whose blood is free from Teutonic or Tatar mingling. Nor is

it strange to find that this very region is gradually receiving recognition as the original seat of the entire Slav family.

Into this very heart of Slavdom and of Russian nationality, the winding channel of the Dnieper provided the convenient road along which the Christian ideals of Byzantium traveled northward. Russia, barred on land by interminable plains and lofty mountains from receiving the Vatican's form of Christianity, lay nevertheless open to the influence of the Eastern Church, thanks to the Dnieper furrow. This conversion of pagan Russia to Christianity by Byzantine monks is an event of the utmost historical significance in the history of European progress. It enabled Russia to play the part of warden of Europe's eastern marches. Between the rushing tide of Tatar barbarism and the immature civilization of Western Europe, Russia proved the bulwark that stemmed the flood. But this historical fact was a direct outcome of the ease with which Byzantines could travel to Russian cities by sailing on the Black Sea and up Russian rivers.

To understand better how Constantinople found itself on the great highroads which men have used in preference to others throughout the ages, it is necessary to bear in mind the Eurasian migrations. Probably the most important prehistoric migration between Europe and Asia was the advance of the Alpines, men of the race of roundheads, who traveled westward from Asia bringing the knowledge of metals to the Europeans of the Stone Age. It was the introduction of a superior civilization from Asia, and Constantinople lay directly in the path of this advance. In the north where the great steppes of Asia pass into the lowlands of Russia and Germany, humanity was less civilized than in the rugged regions of mountains rising to the south. The intercourse between these northerners did not affect Constantinople directly. The main body of the bronze-bearing Alpines crossed from Asia Minor into the Balkan peninsula. They must have forded the Bosphorus. The plains of Thrace and of northwestern Anatolia will yield the secrets of these migrations around the shores of the Golden Horn as soon as exploration will become possible.

In the early times before 3000 B. C. travel was slow and confined largely to the mainland. But the admirable site of Constantinople must have attracted the attention of the bronze-

bearing wanderers who were trickling into Europe. With the growth of maritime travel following human ability to build boats after man had accustomed himself to use metal tools, the water lanes became frequented, and the water route connecting the Pontic shores with the Hellenic seats of civilization was widely traveled. Constantinople's greatness was assured as soon as this route was established. No wonder, then, that the records to which we can turn ascribe the founding of Byzantium to the Megarans in 657 B. C. The date is significant because we know that colonization was carried on by the Greeks at that time. The 7th century was one in which trade between the Greek cities and the harbors of the Black Sea basin was in a flourishing condition. Through this commerce the products of inner Asia were beginning to be known in Europe. Nevertheless we cannot accept this date as that of the founding of Byzantium. The discovery of tumuli and mounds containing stone implements in the suburbs of Constantinople, at Erenkeuy and Maltepe, as well as beyond in the Thracian rearlands and on the Asiatic side of the Bosphorus bears evidence of the occupation of the site before the coming of the Megarans.

The main advantage of Constantinople's site is derived from its position at the junction of two highways which connect Europe and Asia. As long as trade intercourse between the steppes of southwestern Russia and the Mediterranean basin was maintained and as long as Asia communicated with Europe through Asia Minor and the Balkan Peninsula, a share of the profits accruing from that trade would naturally revert to Constantinople. From the 5th century B. C. to the beginning of the 15th century A. D.—a period of 2000 years—an extensive interchange of commodities was carried on between the harbors of the Black Sea and the cities of the Greek peninsula. The Pontic shore was a granary to which hardy Greek sailors repaired year after year, for the supplies of wheat needed by their countrymen. Besides wheat, the steppes of southern Russia provided hides, skins, wool, and lumber. All these cargoes passed through the Bosphorus, stopping at the far-famed city which to the sailor and the trader was both a resting-station and an outfitting-base.

At the height of Rome's power a temporary change in the direction of travel occurred, and a part of the Asiatic traffic

was diverted to Ephesus, whence it was loaded on vessels sailing for Rome. Constantine's choice of a capital in 330, however, re-established the natural order. Ramsay notes that by the time of Justinian the southern route of Asia Minor was abandoned in favor of the northern.² Students of modern economic conditions in the Near East will not be surprised by these changes of traffic lanes, for to-day Smyrna is Constantinople's rival as a port of shipment for Southern Europe.

From 400 A. D. to 1000 A. D. Constantinople was the chief trading-center of the world. The Byzantine flag was not unknown in English ports where the galleys of Constantinople were often to be seen. And in the 6th century every important commercial center of the eastern Mediterranean lands had been superseded by Constantinople. The trade routes of antiquity had been extended deviously so as to cross the Bosphorus. Constantinople had become the city in which commercial privileges and trade monopolies flourished to an extent unknown elsewhere. The commerce of the world was made to leave a share of its profits to the small band of merchant-princes who controlled its routing.

The Byzantine's trade with Slavs was not merely confined to purchases of raw material from Russia. The luxury which prevailed at all Slavic courts during medieval times forced courtiers to spend lavishly on their dress. One could appear at court only arrayed in one's best. Ornaments especially were essential. An ordinary fur coat would not satisfy the upper social circles. It needs must have all the trimmings of pomp imaginable, such as gold braid and surcharges of value. High-priced ornaments were also in demand for the decoration of Slavic palaces. To supply all these wants was Byzantium's specialty. The Slav purchaser in need of silk cloth or velvet did not need to travel beyond Constantinople. The city's markets contained ample stocks at his disposal. Its goldsmiths and silversmiths were famed for their skill in converting precious metals into jewelry. This was the trade which excited the jealousy and envy of Italian cities, for it was only by the advantage of position that Byzantium was reached before the Italian cities whose favored rival it had become.

² *Historical Geography of Asia Minor*, p. 74.

It is therefore natural to find Italian merchants congregating in flourishing colonies in Constantinople. The merchant-managers of the Italian city-states, notably at Venice, Genoa, Amalfi, and Pisa, realized that the economic control of the Byzantine Empire at which they aimed could be secured only by establishing themselves solidly in the Byzantine city.

Constantinople was a city of active trade long before it became a capital. Its prosperity depended on the convergence of land and water traffic toward the Golden Horn. Its situation made it both a European and an Asiatic city, and events which brought disasters to other parts of Europe only served to strengthen the importance of the capital. Thus when Western Europe was cast into intellectual gloom by the invasion of northern barbarians, Constantinople remained the seat of the highest civilization of its time. Later when the Mediterranean was infested by pirates—Norsemen or Africans—trade was diverted to land routes which met at Constantinople. Even the loss of Syria and Egypt by the Roman Empire raised the fame of Constantinople as a commercial center, for the trade between Europe and the East which had passed into the famous centers of these two provinces now flowed naturally towards Constantinople.

The transfer of the Roman capital to the shores of the Bosphorus by Constantine was significant. It implied that Asia was acquiring greater importance than Africa in the Roman world. The ties that bound the two continents to the great European Empire were economic. By the 4th century Africa had been drained of its resources. Commerce and the technical knowledge of the day were unable to continue dealing at a profit with the Black Continent. New fields of exploitation were sought, and Asia began to occupy the chief place in the minds of Roman leaders.

Prior to the occupation of Constantinople as imperial residence the Roman Empire had been a political entity which symbolized the unity of the Mediterranean region. Rome, admirably situated at equal distances from the eastern and western ends of the inland sea, had become mistress of the world by virtue of the advantage of geographical position. The wealth of Africa was the foundation on which the power of the Roman capital rested. The foundation was undermined by the activi-

ties of the empire's fiscal agents, men who acted merely as the agents of masters in Rome. Constantine realized the tottering condition which the mainstay of the empire had attained. His determination to keep closer watch on the revenues from Asia was practically forced upon him by existing conditions.

The value of Constantinople's site asserted itself soon after the foundation of the new city of Constantinople. This event had a disastrous effect on Alexandria and Rome. The difference of language saved the Latin city, but Alexandria, which hitherto had occupied the first place in the Greek intellectual and religious world, lost its rank as soon as the supremacy of the Byzantine capital was established. The Bishop of Alexandria, who was the recognized head of the Greek Church, saw his prestige and authority transferred to the Patriarch of Constantinople. With the decline of Greek life in Alexandria, the city was abandoned by the scholars and students who had been accustomed to gather in its learned institutions. Their studies were resumed in new reunions along the banks of the Golden Horn. Likewise all the Hellenistic tendencies and ideals of Asia Minor were abandoned in their famous centers—Antioch and Ephesus—only to be replaced by the revival of thought and active life which by the 5th century marked Byzantine life.

A history of Constantinople is therefore fundamentally the account of the results of a convergence of roads. The wealth of continents poured into the city placed at the juncture of world highways. Constantinople became a community of merchant princes and of captains of industry of various nationalities. This is the spectacle afforded by an intimate insight into its society during Byzantine times. For a time the city's triple wall swept around the world's best-supplied warehouses. The harvests and products of great plains north of the Black Sea, consisting chiefly of wheat and other cereals, were collected and stored in Constantinople. Thither also were sent Asia Minor's varied products. From Spain and Italy, from Germany and Russia, from India and Cathay, merchandise commanding high prices reached Constantinople partly for consumption, but mainly for redistribution. The northern lanes of traffic drew the furs, the slaves, the honey, and the wax of Scandinavia and Russia. With the currents of the Black Sea flowed a steady stream of spices, dyes, and gems found in remote corners of

Asia. Caffa, Tana, and Trebizond were the Black Sea harbors where caravan goods were transshipped to Constantinople. Arabs, Armenians, and Persians acted as gathering middlemen for the merchants of Byzantium, while the Slavs and Teutons of the wide Danube lane played the part of the distributing agents.

Gradually after Constantine's time, the silks, gums, and dye-stuffs of India were supplied to all of Northern Europe, as well as to a great part of the western districts of that continent by Byzantine merchants. The history of adventurous Byzantine navigators remains to be told. We know at any rate that by the 11th century, the Byzantine merchant navy occupied the first rank in numbers. The fact is that Byzantine emperors had always shown great interest in the Empire's navy. This explains why Scandinavian, Teuton, or Anglo-Saxon adventurers could always rely on finding employment as sailors in Byzantium.

Society in Byzantine Constantinople reflected the peculiar geographical situation which affected the destiny of the city. The ease with which commerce and industry could be undertaken at this center accounts for the creation of a wealthy and powerful Byzantine 'bourgeoisie.' This element was the mainstay of the Byzantine treasury. It was possible to tax its revenues and Byzantine government officials never neglected this opportunity of increasing state receipts. Finlay reminds us that taxation yields little where nobles and serfs constitute the only strata in the population.² In such a state opposition above and poverty below will thwart the revenue-collector's efforts. A trading community, however, is the very foundation of power. Much of the civil and military superiority of the Byzantine Empire as well as its prestige depended on the tireless activity of the merchant class in Byzantium.

Of the great fortunes accumulated in the days of active trading not a vestige has survived. Constantinople, buffeted by the strongest gales of history because of its site, is unlike other capitals situated more fortunately away from the highway of world casualty. In these many wealthy residents trace the origin of their riches to medieval times. We must therefore seek a more tangible manifestation of the influence of this site.

² *History of the Byzantine Empire, 727-867*, p. 422.

This we find in the art which graces the city's monuments. To follow the evolution of Byzantine architecture is to trace the growth of a style which has culled from East and West alike and which, while finally reaching the distinctive stage which we call Byzantine, nevertheless resumes in itself a blend of splendid conceptions originating in Asia and Europe.

The single example of St. Sophia, where radiant glory and pious fervor are joined, will illustrate my thought. The basilicas of Greek-Roman origin here underlies the cupola transplanted from Asia. Not only does the union of the two produce a characteristic Byzantine style, but each of these features have undergone modifications suggested by the creative genius of Byzantine architects. Thus the straight line of Roman basilicas is changed into a polygonal or curved outline, while the dome is eventually made to rest on the famous pendentive of Byzantine architecture. Through this combination the pomp of Asia and the piety of Europe's Christianity were first brought together upon a site eminently indicated by nature for this union. It was no accident, but the unfolding of natural progress. In St. Sophia there is more than a concrete edifice of stone and marble. The noble sanctuary is the symbol of an idea suggested by the site over which it rises. By its dominating position Constantinople had become the capital of Eastern Christianity. Its mission was to replace pagan by Christian ideals in Eastern lands. With this end in view it was customary to exact attendance of princes and ambassadors at the divine celebrations held in the cathedrals of the Byzantine capital. All the beauty that fancy could create was requisitioned in order to impress foreigners with the greatness of a religion whose recognized head was the Byzantine Emperor. In this sense St. Sophia as well as the marvelous beauty of its interior decoration are products of the site we are investigating.

One effect of the convergence of natural routes at Constantinople is illustrated by some of the conditions which marked the trade intercourse between Russians and Byzantines. In the 10th and 11th centuries trading between Russia and Byzantium had acquired importance. But let us not forget that the transactions were almost always ratified at Constantinople. Thither came the Russians to settle particulars regarding their trading. The Greeks rarely went to Russia. In other words, owing to

its splendid position Constantinople had conferred upon its residents the inestimable advantage of being able to wait for customers in their own shops without having to resort to the fatigues of travel in search of new markets. What was true for Russian traders was equally customary with merchants of other nationalities. But without such a privileged position the great city could never have attained the position of world emporium and clearing-house which made it so conspicuous in medieval history.

To call Constantinople a European city is a misnomer. The ties that link the capital to Asia have at all times been firmer than any bond with Europe. Having emerged from the period of provincialism which narrowed the outlook and interests of its inhabitants to their immediate neighborhood, and having become mistress of the Eastern Empire, the city at once assumed the position of leadership which was the appanage of its splendid situation. It was on Asia, however, that she drew for the maintenance of her splendor and prestige. Asia Minor and the shorelands of the Black Sea abounded in natural wealth which was transferred in time to the capital city. Without Asia, Constantinople could never have played the glorious part which is hers in history. Asia's claim on her is as great as that of Europe.

The number of Asiatics at large in the city's streets suffices to betray the strength of Asia's hold over Constantinople. To-day, as in the past, there are more Asiatic residents of Constantinople than European. Garments of varied hues and patterns, everyone a memento of the past, predominate over the severe and less attractive attire of Western style. But the West is coming into its own, unfortunately for the artist perhaps, for year by year one sees more Asiatics discarding the clothes copied from models handed down by their fathers.

Perhaps the chief reason of Asia's attraction for Constantinople will be found in the fact that back in the early years of the city's existence the highest civilization flourished on the Asiatic mainland, whereas a vaguely known barbarian world occupied the territory north and east of the Balkan ranges. This Asiatic influence has been unfortunate for the mentality of Constantinople's citizens. It made the Byzantine mind partial to the ideals of Asia. And the world seen through Asiatic

eyes, be it Anatolian, Chinese, or of any intervening type, never was reality. It is fancy's creation robed in the garment of desire or hope. It brought the spirit of fatalism, that is to say of laziness, within the triple circle of walls raised by Theodosius. It has kept the matter-of-fact and logical mind of the West from obtaining the ascendancy in the city and hence throughout the length and breadth of territory which acknowledged the capital's rule.

A closer view of the site of the great city reveals the natural strength of the position. The city spreads in the shape of a triangle whose base on the west extends from the Golden Horn to the Sea of Marmora. Both the northern and southern sides contain numerous small bays which were utilized as harbors in Byzantine times. The apex of this triangle, a hump of pleasant green, is known as Seraglio Point and is the oldest section of the city. It was the site on which the Akropolis of pre-Roman days was built. Here the onlooker's sweeping gaze embraces the splendid sight of the Bosphorus, Golden Horn, and Sea of Marmora seen together.

As a harbor the Golden Horn has ancient fame. A chain across its mouth along the line of the first of the modern bridges closed it at will in medieval times. By its depth and the large area it covers it affords to-day a harbor in which the navies of the world can gather together. For beauty and practical advantages the site can be compared to no other, for it is at once city and country, river and sea, valley and hill, garden and grove.

Constantinople, like Rome, had its seven hills. And the ancients who had a keen eye for majesty and dignity made good use of these eminences and crowned their summits with notable edifices. Proceeding from east to west, we observe that the easternmost hill was converted into a pedestal to support the seraglio, St. Sophia, and the mosque of Sultan Ahmed. The Hippodrome also ran lengthwise across its ridge. The valley which separates it from the next hill is the winding uphill road which runs from the outer Golden Horn shores past the Sublime Porte to St. Sophia. The mosque of Nouri-Osmanieh is built at the top of this second hill. Close by and still on the same eminence rises the porphyry column of Constantine the Great, better known as the Burnt Column.

From this second hill the height of land continues to the third through a ridge which overlooks the valley dividing them. The valley may be remembered as the one in which access is had to the Grand Bazaar. The third hill is crowned by the imposing mosque of Suleyman the Magnificent. Here also rises the ancient palace of the sultans which later became the Seraskerat, or War Office.

The aqueduct built by Valens crosses the next valley. Then comes the fourth hill with the mosque of Sultan Mohammed the Conqueror at its top. The fifth contains the mosque of Sultan Selim. The sixth hill is associated with the names of Byzantine Emperors rather than of Turkish Sultans. It was once known as the hill of the Blachernae from the name of the palace which occupied the spot. The seventh is the Xerolophos, or Dry Hill. On it are found to-day the quarters known as the Altı Mermer and Psamathia.

But if the site was open to the traffic of the world, it was also one of singularly difficult access in the last stretches of the roads which ended at its city gates. I must lay stress on this geographical combination, for it is the very foundation of the strength and influence of Constantinople. The triangular area which I have just described was partly encircled by a natural moat which proved more than once impassable to attackers. The enemy coming from Asia found that the width of this moat had often caused the failure of the city's foes. If they advanced from the landward side, a short line of formidable walls extending in a triple row from sea to sea arrested their progress. Beyond the sea and land walls nature had provided a series of advanced outposts of defence which have proved their worth to this very day. On land in Europe, the Balkans formed a mighty bulwark open here and there along defiles which could be conveniently defended. In Asia Minor, the hills of Bithynia and of the Trojan district dominated the approaches to the city. What such a site has meant for the city may be gathered from the fact that even the Turks, splendid soldiers as they were, failed to conquer the city during their westerly spread in the fourteenth century. Fully one hundred years were to elapse after their conquest of Eastern Balkan territory before they were able to become masters of the city.

By water the entrance of the Dardanelles and the Black Sea mouth of the Bosphorus—both narrow, winding, and swept by

currents—seemed ideally devised for the protection of Constantinople. The whole world has witnessed the failure of a splendidly equipped modern army to turn the Dardanelles by land. Why? Because of the line of hills rising in steps above the exceedingly narrow strip of shore which surrounded it. This narrow strip and the step-like hills explain why casualties passed the hundred thousand figure at this point in the recent Dardanelles campaign. Courage was of no avail, for the defenders merely waited with their death-dealing machines and killed their assailants by the thousand. On the Black Sea side conditions are even worse, for the rocky hills there rise precipitously out of the sea. Neither was landing attempted here.

Thus even in the gasps of Turkey's death has Constantinople's position added a short lease of life to the empire. The city, without which the entire edifice of Turkish imperialism would crumble to dust, cannot be approached by sea. A short defile, narrow and tortuous, the Bosphorus forbids access to hostile ships at one end. A longer strait, the Dardanelles, equally impassable (as events have shown), guards the other end. Currents here favor the besieged, and floating mines scattered over the flowing waters become a deadly menace to attacking invaders.

Besides its advantages as a trading-center Constantinople was therefore the ideal site from a military standpoint for an empire which was constantly engaged in border fighting. As rulers whose dominions extended over Europe and Asia the Byzantine Emperors could not find a better location from which they could march out at the head of their armies or to which they could retire with greater convenience. To-day in European general staff colleges it is customary to teach that Constantinople is the apex of two triangles whose bases lie in Europe and Asia respectively. The base of the European triangle is the line drawn from Monastir to Pirot. In Asia the base line extends between Erzerum and the Cilician Gates.

A remarkable and persistent influence of the site is presented by the cosmopolitan character of the city's population. That representatives of both continents were fated to meet and live side by side at the border zone was inevitable. And society through the ages in Constantinople has been made up of elements drawn from Europe and Asia. Greeks, Turks, Armenians, Arabs, or Slavs of different nationalities all descended from ancestors that settled within the imperial precincts in times

immemorial elbow each other to-day with no less variety than at the time of Constantine, Justinian, or Basil. The city is a meeting-place of men and ideas which have never blended to produce a uniform type because on such a site the individuality of each element was maintained by a constant flow of new arrivals. The Londoner or Parisian of our day is an Englishman or a Frenchman. A Washingtonian is an American. But in Constantinople, the scion of a very old family may be an Armenian, a Greek, a Turk, a Russian, or an Italian.

Of the influence of that site in the history of the world much may be said. The achievement of Byzantine Emperors for the cause of civilization—no mean contribution—was made possible because the site of their imperial residence afforded them protection against the destructive forces of barbarism which constantly threatened to arrest the march of progress. In the shelter of that site Constantine broke loose from the nefarious conservatism of pagan Rome and consecrated the city and empire to the cause of Christian ideals with which the cause of progress was at that time one. There also Justinian laid the foundations of a legal organization which has stood the test of time. Later the Iconoclast Emperors stayed the conquering march of Mohammedan soldiers in the East at the time when the Christians of the West were saved at Poitiers. The line of Macedonian sovereigns broke the power of the wild eastern hosts in the pay of the powerful Bulgarian kings. Even the Comneni, who had to fight against western and eastern barbarians, owe much to the site. And if the Paleologi fell at last, history has recorded the odds against which they fought and the indifference of Western nations to their fate.

In estimating the future importance of this remarkable site it is necessary to remember that the tide of western civilization is now flowing eastward. Overland traffic between Europe and Asia, that is to say between European centers of industry and the Asiatic markets of consumption situated in the densely populated regions of the eastern continent, is bound to pass through Constantinople because the city lies on the path of shortest distance between the two centers. Even the air line which we must henceforth take into account passes over Constantinople in its shortest stretch between populous India and industrial Europe.

As in the past, the future political status of Constantinople is bound to be affected by such relations. To discuss this theme beyond the geographical problem in this paper is not my purpose. I shall therefore confine myself to pointing to the natural boundaries available in case Constantinople should be turned into a neutral city under international control, as has been suggested on various occasions.

To internationalize the site of Constantinople implies internationalization of the elongated belt of waterways comprising the Bosphorus, Marmora, and Dardanelles. It is of the utmost interest to note that this region is a well-defined unit which, on the European mainland, extends westward so as to include the valley of the Ergene. In Asia its boundary is even better laid off by the valley of the Sakaria river and a long fault line which may be distinguished on a map by a string of lakes. Advantage could be taken of these geographical features for the establishment of a neutral zone with Constantinople as headquarters.

But whatever the fate in store for Constantinople, the fact remains that from the time of Constantine's selection of the city as imperial residence to our day, the history of Constantinople has more than once been a summary of world history. It is safe to predict an equally momentous future for the city as long as the value of its site to the inhabitants of the eastern hemisphere shall remain unimpaired.

INDIC AND INDIAN RELIGIOUS PARALLELS

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The word 'Indian' in my title is intended as an equivalent of the uncomely 'Amerindian,' a monstrosity which I find it impossible to pronounce with equanimity. It is not my intention to point out what is common to all or to much of the savage world, such as belief in ghosts, in another world, in the mana of the inanimate, in the Hindu forms of Squantum and Tantum as shared under different names with sundry peoples, but to indicate closer resemblances between the Indians of the East and of the West. Not often do we find religious groups so isolated. All the religions of antiquity were more or less fused. Sumerian, Babylonian, Egyptian, Greek, Roman, Celtic, the general foundation of European superstition, even the animal-gods of Africa and the Western origin of Japanese and also of Chinese culture—these are debatable topics bristling with queries. And now too we find even India invaded and the Persian conquest anticipated by the Assyrian; nay, even the Seven Stars that used to shine so naturally above the Panjab are at present marked 'made in Babylon.' But thus far the genuineness of Indie invention has not yet been impugned to such an extent as to make it probable that our Redskins ever provided India with its religious beliefs, while only a few daring souls have ventured to urge that the primitive culture of America derives from the reckless merchants of Egypt or from the devoted missionaries of the Buddhist church. We have then an unusually fair field or two fair fields in which to study religious flora and fauna presumably of independent creation. That no sane historian believes in a common root or seed of the growths found therein, this fact makes what in itself would be merely an interesting collection of parallels a valuable exhibit, in that it demonstrates how near and yet how far may be religious phenomena alike in form yet diverse in origin.

A parallel which elucidates a custom may well serve as a beginning. In Sanskrit literature we have numerous references to the vermilion line traced on a woman's head at the parting of the hair. In epic and drama it is always spoken of as a mere

adornment. As such it figures in the poetical description of dark clouds parted for a moment by a vivid streak of lightning 'like the vermillion line between a woman's claudy hair.' In America, as an introduction to the parallel I would remind you that among the Siouan tribes it was customary at certain stages of a girl's life to paint red dots upon various parts of her body and that a dance with prayer was performed at each dot. In other words, this equivalent of tattooing¹ was a religious act, performed obviously with the intent of guarding the girl by means of the red paint. Now, however, the perfect parallel is found among the Blackfeet and Crow Indians, whose women were all adorned (note that it is here an adornment only) with a vermillion line drawn from the forehead to the crown at the parting of the hair. When we consider the religious significance of red paint as applied to village idols in India it is almost inevitable to conclude that the Indic and Indian means of beautifying women had a similar religious origin and that the thing of beauty was originally intended as a safeguard forever. Yet even without any explanation it is rather interesting to find the Rani and the squaw adorned in the same way.

Speaking of hair, I am tempted to violate my own rule and touch on one belief not confined to Indic and Indian thought. Nothing in religion is so curious as the persistence with which old ideas, quite outworn and yet potent, survive. You all know how savages believe in a hair-soul, that is in a hair-power, a spiritual vigor implicit in hair, to express it in terms slightly in advance of the hair-soul belief. Many traces of this remain in India. The ritual use of hair, the prayer over the first hairs cut from a child's head, the hiding of hair, etc., all hark back to this superstition. In America the same superstition takes many well-known forms. The Indians of Mexico and Peru offered the eyebrow-hairs in casual sacrifice to the Sun-god. Hair burned upon the mountain-top was offered to the sun in divination. In the North, the scalping of a foe was primarily to control the hair-soul and it was believed that the scalped Indian remained in the next world subject to him who held the scalp. That is the reason that the scalper not only took the scalp, but wore it. It was not a decoration but a deed of ownership: whoever held it possessed the soul of the scalpee. Now

¹ Regular tattooing was practised on the Peruvian littoral.

this belief in hair-power was still strong enough among some of the Northern tribes to give the chieftainship to the man with the longest hair. Some of the Mandan Indians grew hair six feet long and when an election took place this hair sometimes grew a foot longer. It was suspected that horse-hair was often deftly interwoven with a hero's locks and on several occasions it was charged that a chief owed his election to his pony rather than to his own spiritual superiority. I think it is most probable that an unadulterated form of this belief lies at the root of the rule which prohibited an Aztec priest of the Sun-god from ever cutting his hair. As with Samson's hair, there is here a clear connection with sun-strength; in fact in Mexico sun-beams are called sun-hair and Uitzilopochtli as sun-representative appears as 'hair of the sun.' One parallel at least may be pointed out here. The different clans in the Peruvian state were distinguished by the way in which their hair was dressed, dressed, parted, top-knotted, tufted, etc., which is just the way the Indie clans were distinguished.⁷

Speaking of clans I would remind you of the decimal system of organization recommended in the Hindu law-books, in accordance with which a group of ten families or villages forms part of a larger group of a hundred, this of a thousand, and a general overseer is over all. So the Peruvian state is based on ten families, part of a larger group of one hundred, and this of a thousand. The priestly caste at the head has the privilege of not being obnoxious to capital punishment, just like a Brahman. But among the Chibchas or Muiscahs of Colombia there is a more remarkable resemblance. The high-priest is like a Buddhist Lama, secluded and too holy to touch earth; he belongs to an inherited hierarchy, though individually elected. The whole Chibcha constitution divides the people into four castes, priests, warriors, agriculturists (including traders and craftsmen), and helots or tributary nomads, almost an exact duplication of the Hindu caste-system. The priests are hereditary in the female line and act as shamans, judges, and executioners.

⁷ In Peru, the first cutting of a child's hair was done by an elder relative, who used a stone knife. The Inca crown-prince's lock was first cut by the high-priest. In some South American states a hair-cut was a privilege and long hair was a mark of servitude, religious belief yielding to convenience.

The soul-problem touched on above raises the question whether the Indic and Indian views agree in any marked way. Besides hair-soul, as all students of lower religions know, there is a soul or power inherent in various parts of the body, notably in the saliva or spittle. Thus in the Rig-Veda a girl preparing food for a god chews the grain first. The subject has been adequately discussed by L. von Schroeder. Now this chewing of grain in divine rites is found among our Indians. Among the Hopi, for example, there is a sacrifice of chewed grain and the Peruvian acaá is prepared by women who first chew and then boil and ferment it, because, as is expressly said in both cases, saliva is medicinal. Another point in regard to the soul. The Northern Indian believes in metempsychosis in life, that is, a wizard becomes a wolf (were-wolf), but seldom believes that a dead man is reborn as an animal. Yet the dead are reborn as men, finding their growth-soul among the bones preserved for that purpose. Moreover the Dakotas believed that to become a wizard one must be born again four times in the same body, dreaming of gods between the times of reincarnation, and this seems to be a true theory of metempsychosis. I would say that though in theory according to Brahman belief a man may be reborn as anything, yet it is generally assumed that the reincarnation will be in human form. In regard to the dead, they are not buried among some of the Plain Indians but hung upon trees or raised on primitive towers of silence, as were the dead Parsi and some Hindus (thus the Mandans and Siouan tribes generally). Mummification is not Indic, so I will not stop to explain the mummies of Peru, but I should like to compare the killing of objects put into the grave in Peru and India. The warrior's bow is broken in the Vedic burial hymn because it must be dead like its master; so in Peru all objects for the next life are killed or broken. The Peruvian widow also like the Hindu is expected but not formally required to commit suttee. Death is called the Shade in Peru, Supay, and this Shadow as god (to whom sacrifice is made) is like Cháyá, Shadow, as a name of Siva (but cf. also Celtic Seath as a giant as well as Shade). Instead of gods carried into battle (this is common; they were wrapped-up images) such as Mextli, the Chibehas sometimes carried the mummified corpses of great warriors, as the Peruvian Chanca carried the body of Uscovilea, a former

hero. This seems to imply that the warrior was still potent, but it may have been merely to inspire courage. Sacrifice to the Manes is common to all tribes and requires no comment, but the Digger sacrificed to a dog as ancestor; he was a Dog-man, such as is also found in India. Of dogs in hell or leading to hell, there are two, but not of the same race. The Aztec dog is black and the Peruvian is red.

A word may be said here of creation-myths. The Eskimos believe that woman was created from man's thumb, as Dakṣa in India is created from Brahman's toe, but there is no close resemblance. The creator and cosmic egg may appear in the story of Manco Capac, Great Man (cf. Purusa), and Mama Occhio, but Occhio is also understood as the moon. On the other hand the paired gods of the Hopi are like the androgynous deity of India. These pairs are usually the male and his female counterpart, like Indra Indrāṇi, but sometimes, as in Mexico, two brother suns are found. One of the most interesting parallels is that on the higher plane of speculation found in Mexico. As is well known, Brahman in India receives as creator little homage because he is no longer active. So in Mexico in the higher realm of theology there was a creator-god, but he received no sacrifice and generally he was identified with the national Uitzilopochtli or regarded as a god of medicinal power who sent and cured diseases. But children's diseases were caused by hags, who were in fact the ghosts of women dying in childbirth, and were associated with the god of war and lightning, so that these mothers appeared in the form of lightning-flashes. Now this is a perfect parallel to the Mothers accompanying Siva. Their main function was to send diseases to children, just as in India, and they too were attendants of the god of battle and storm. Before leaving this Aztec pantheon I must mention Tezcatlipoca, who is the stern god of law and justice. He spies upon men and wanders about looking for those who disregard his laws. As good a parallel to Varuna as could be found, and no need to go to Babylon to find him!

To touch again upon the subject of personal markings, which I introduced above by accident apropos of the hair-parting, I would call attention to the resemblance between the sectarian markings of the devotees of Vishnu and Siva, the one vertical and the other horizontal, and the markings on the figures of

Mexican gods, the agricultural gods having vertical and the hunting-gods having horizontal stripes. There seems, however, to be no inner connection in these practices, though there is a striking likeness, for Vishnu and agriculture and vertical lines may be said to make one group, as Siva and hunting and horizontal lines make another. But apropos of women there is another curious coincidence. According to Hindu law a girl is married at 11 or 12 or younger and a man at 24 or 30. In North America the girl was married at 11 or 12 (in Peru at eighteen to twenty) and the man at twenty-four. At his initiation the Sioux boy had to stand on a stone while the priest prayed for his welfare to the four quarters as divine beings, Winds or Directions. Now the stone in this ritual is distinctly said to represent earth, and this reminds us that at her wedding a girl in India has to stand on a stone, which also as an emblem of firmness represents the earth.

The four divine Winds or Directions just mentioned are a perfect parallel to the Hindu four gods of the quarters, in regard to whom I have written elsewhere. The gods of the quarters or directions in India are of course subsidiary gods; they have been subdued by the greater gods of a higher cult. But they are old and in antiquity are very lofty gods, to whom are sometimes added two more, the god of the zenith and the god of the nadir. Now in America these gods were almost the only real gods acknowledged by the Northern tribes. For example, in the seventeenth century the Algonkins themselves said that they had only these four gods and him above. In some of the rituals again, the Hopi Indians added to the four the one below and the one above, just as the Hindus did. I need not remind you that the number four is interwoven with the whole religious ritual of America from Maine to Cuzco in Peru. The tree of life was a four-fold cross in Mexico, for example, which betokened weal in four directions, a svastika, and all the religious ceremonial turned about this number, circumambulations of the temple, the dishes to receive the sacrificial blood, the number of priests, etc., were fours or multiples of four. There can be no question but that the four chief Hindu gods of the old pantheon, Agni, Yama, Varuna, Indra, are really names given to the same four divine quarters as those of the American Indians. May I add an inconsequent note, on the subject of the tree of life? As

emblem of weal and hence of health, it was itself, this Aztec svastika, a quasi-divine thing, a sort of Aesculapius, and to it was made a sacrifice—of what? You will not be surprised to hear that it was a cock, almost the 'cock of Aesculapius' in Mexican form. The cock is the bird that announces the sun (as in the Avesta) and hence the bird of health; consequently a sacrifice to health is the cock. This association is reflected, very dimly I admit, in the association of the health-giving rain with the peacock in India. The direct parallel here fails, for the Hindu cock is the bird of the god of battles, obviously as a fighting bird.

I have intimated that whereas the Hindus gave gods to their four quarters, the Redskins simply deified the quarters without giving them divine names. But the impact of the higher faith has had an effect in Yucatan not unlike that in India. For in Yucatan the four direction-deities have not been rejected by the Catholic Church but adroitly incorporated into it as ministers of the Trinity and here not only are the four directions represented by four colors (this is general, though the colors are not always identical), but they have been named; the god of the east (red) is now St. Dominic; of the north (white), St. Gabriel; of the west (black), St. James; and of the south (yellow), Mary Magdalene. After this fashion has many an ancient deity been preserved beyond his natural retiring-age. You will remember that it was in the nineteenth century that Grecian peasants were still praying to the image of Demeter and perhaps at this very moment the girls of Sicily are singing that exquisite hymn to Venus recorded but lately by Professor Ridgeway's friend:—

O santa Venere,
Si bella, si tenera,
Que es Paradiso
Tripa avanti Gesù!

There is to me something very alluring in this conversion of Venus into a saint dancing before Gesu and in turning the gods to whom our Indians used to pray into such saints as Gabriel and Mary Magdalene. Just so, we may be sure, four gods of direction, functioning as such or as winds, were worshiped first in India, until later they renounced their anonymity in favor of Agni, Indra, and the other gods who had names but were originally without relation to the four points or winds. You

may ask, perhaps in jest, whether the intrusion of Mary Magdalene is not something quite without parallel, a feminine element not recognized in India. But I shall point to Bhartrhari, who sings of a Dikkanyā, or feminine guardian of direction.

This is as good a place as any to compare the gods themselves. There is no doubt that the Aztecs are merely a southern wave of Shoshonean Indians and their gods are in fact only gigantic figures already known in smaller shape in the North. But I shall not go into details here, nor point out the closer similarity between Indra and Tialoc, Yama and the god of Mictlan, Varuna and Viracocha (in Peru), and Agni and the 'old old' god of fire, since these nature-gods are in part not unlike other foreign gods having similar functions. Yet there are a few points in respect of the gods which I cannot leave unnoticed. Tialoc as god of war and fertility has priests dressed as frogs who to induce rain have to imitate frogs and quack like them. The Hopi have a frog-drama of fertility, where reproduction is drastically represented. In Peru the summer solstice (December) is introduced by a purificatory flogging and a tug of war on a varicolored rope of four colors. The Eskimos have a similar tug by men representing two kinds of birds, the issue of the strife being prophetic of the year. Finally there is the Tunja year-end feast, in which twelve men in red dramatize a dirge around one man in black, obviously an American lament for Adonis, as the year-contest is a drama of magical content for the assurance of a good year, probably of the same sort as the Bogota harvest-festival in which men appear in masks and animal-skins. In the Hopi performance the vegetation-god, Müyinwu, is actually decked with corn and has the signs of sun and rain, and the dance around this figure is almost a maypole-dance.² Some of

² In the Oraibi Soyal ceremony (of nine days at the winter solstice) the mask is decorated with figures of frogs, imitation ears of corn-husks, red horse-hair, and eagle feathers. A sort of svastika-fringe runs around the top. The performing Katsinas talk in a disguised voice, imitate cohabitation, and make constant use of saliva and honey (spat from the mouth). One man represents a (sun-)hawk. A special figure images Müyinwu (spirit of generation). The Star priest revolves the Sun-image, being baptised by the (representative of the) war-god, while a song is sung in honor of the feathered-serpent, Lñöökow, and the Sun-priest dances. The sacred *baños* are sticks, marked as male and female, symbols and carriers of all good luck but chiefly of fertility, which are finally deposited

these elements appear in the Hindu drama of Krsna and Kamsa. To mention briefly a few points in connection with the other gods. The Hades of Mictlan is reached by traversing underground deserts, rough hills, winds that cut like knives, and four or nine streams. One passes to the next world over a log or a bridge made of spider-thread (Northern and Southern, respectively) and some of the Algonkins believe that the parting of the ways to good and evil worlds is revealed by a lightning-flash, while a spirit guides the good on farther to paradise, which, I admit, is rather Persian than Indie. Persian too, or Zoroastrian, is the fervent conviction of the Peruvian sun-worshippers expressed in the phrase, 'the army of the Incas is the army of the Lord (Sun-god),' though the spirit of the utterance infuses Indie thought as well. Of the fire-god I will say only that he is represented as black-green-yellow, that he hid in water (also in stones), and that the fire is solemnly renewed each year by all Indians, from the Sioux to the Peruvians, who had a solemn fire-renewal at Rimac every June. All these are Hindu Agni-traits. Further it is interesting to note the sacred character of the sacrificial straw. On the Plains this is usually of sage. Thus in the Cheyenne Fifth Paint the priest carefully spreads the sacrificial sage-bushes in four heaps for the four gods of direction and one more for the sun, on which the priest dances and others sing to the sun. Here, too, I must refer to the swinging-ceremony still retained by the Plain-Indians and called 'looking at the sun,' which I cannot doubt is identical with the sun-swinging ceremony of India.* In America the Indian has hooks placed

in the Sun-house, after being first consecrated with meal and honey-saliva. They are usually made for cloud-deities; but sometimes for the dead who, gratified by this attention, will send good crops to the Hopi. The ritual smoking is chiefly for 'cloud-making.' Fasting, bathing, and prayer make part of the rite, in which the powdered hearts and intestines of slain enemies are used as magical fertility-powers. The number four is conspicuous in the ritual though the altar-stones are arranged for six directions (in color they are here yellow-north, green-west, red-south, white-east, black-zenith, variegated-nadir).

See Dorsey and Voth, *PCM* Pub. 55 (1901).

* The 'freeing of the horse' by the Pawnees is a sacrifice 'in the spirit,' possibly to the sun. The rite itself reminds one of the horse of conquest in India, but the animal is set free as a sacrifice and remains a sacred animal.

under the muscles of his back and swings all day or till he is exhausted. The idea of a sun-boat also appears in America (Algonkin) and it is tempting to see in this a survival of the swing, perhaps to connect it even with the Vedic sage's excursion in the boat or swing of the heaven-god.

It will not be necessary to refer to fertility-charms of the heart's blood (Aztec) nor to the fertility-goddess Mayauel, who rides upon a tortoise, as does Ayopechtl, the birth-goddess; but, in passing by other aspects of serpent-cult as vegetation-deity (the relation between serpent and fertility is too common to be useful), I would call attention to the thoroughly Indie notion connected with the winged-serpent Quetzalcoatl, who, 'coiled up as a snake, waits for the beginning of the new era,' exactly as Visnu sleeps on his coiled-up Nāga. There is in Quetzalcoatl a Messianic idea that he will return bringing a new age, although, as god of the east and so of the east wind he sometimes descends so low as to be nothing more than wind or breeze, and as a breeze he lulls to sleep and so is invoked by thieves to put to sleep the persons who are to be robbed, as the Vedic thief has a little prayer lulling his victims to sleep. This leads me to remark that the Indian conception of the divine voice is always that of a low indistinct murmur, an unintelligible voice of sacred character understood only by the priest. In India the voice of gods reflects their natural phenomenal character and is always a loud roar, unless indeed the god goes disguised. And the unintelligible murmur is rather that of the unintelligible ancient dialect. Before parting from the sun I may add that the primitive Aztec oath is one taken by sun and earth, and that the one who swears does so by touching earth and putting it to his lips. In India the one who swears also touches earth but I do not know that he 'eats earth.'

Only remotely connected with the gods is the teaching in regard to the five ages found in Mayan and Mexican cosmology but in a fragmentary condition. By comparing the different accounts it seems that there was a theory of five ages called suns. The fifth age or sun has no name; it is the present age. The four ages preceding this are called the ages of Earth, Fire, Air, and Water, but the Aztecs have incorporated their own gods as regents of these ages. The pre-Aztec conception appears to be that the first age was destroyed by beasts, who devoured the

men and giants of that Earth-age. Then came the Fire-age, destroyed by storms, when men became monkeys. Then followed the Air-age, when Tlaloc sent rain and lightning out of the air. This was followed by the Water-age of Chalahuitlicue, when a deluge destroyed the earth and men became fishes. Here again the five ages are rather Greek than Indian, but the conception of the final deluge (the deluge idea being pan-American) is that of the end of the aeon familiar to Indian thought. Also the idea that the gods are swept away with the end of the age is reflected in the anxiety with which the end of the calendar cycle is looked upon. At the close of this (fifty-two years) there is the greatest fear lest the sun may not rise and services are held, directed to the continuation of his existence. By the way, it may be mentioned also that the Hindus believe that the gods go away every year and for a season the world is god-less. So too in Peru there is an anxious moment called 'Return of the gods,' when the gods, who all have been away somewhere, are returning. In September there is a mark discovered on a heap of maize put there for this purpose, and when the priest discovers the 'foot-step of the god' great joy follows with a drunken orgy, for the gods may end with the age and no man knows when that shall be.

This drunken orgy is, as in India, part of a divine service. Communion with the Indian god was obtained through intoxication, as it was obtained also through eating the victim identified with the god. The intoxicating *oetli* was itself a divinity like *Soma*, and when in Colombia, for example, on a pilgrimage (for pilgrimages to holy watering places were as common as in India) a man got so drunk as to die, he was regarded as having sacrificed himself and became a sainted character. Only in one respect the Mexican differed from the Hindu, for in Mexican Tarascan we are told that divine intoxication was also induced by smoking!

Speaking of communion with divinity I should like to call attention also to the proxy gods of Mexico and Peru in the shape of dough-images, like those eaten in lieu of the animal victim by the Visquite. At certain divine festivals images of the Aztec gods, for example, were made of dough, and when the image had been shot to pieces the dough-fragments were devoured as pieces of the god. The communion by intoxication

seems to be rather that of the supposedly divine exaltation than by drinking of the divine blood, and this is substantiated by the parallel use of tobacco, the 'communion' here being necessarily that of ecstasy implicitly understood as of divine origin.

In Peru religion was rather more elevated than in the North. Thus the baptism of the Northern Indians (like that of the Hindus) became total immersion and so the intoxicant itself became a divinity. Here too we have the only approach to a trinity, not like ours but quite like that of India, for just as Brahman, Viṣṇu, and Śiva represent only different sectarian and eventually different geographical conceptions of one highest god, each highest being then equated with its sectarian-geographical rival, so in Peru the great god was really a combination of the Incas' Sun-god as highest god, with the highest god of the littoral, Panchacanac, and the highest inland god of the Quichuas, overcome by the Incas, the lake-god Viracocha. It is to this Viracocha-Panchacanac as at once creation-, water-, and sun-god that the most intellectual Peruvians prayed as to the Supreme Deity, generally invoked by the Peruvian Inca as Viracocha. May I close with citing some of the verses addressed to this god, not without an implicit question as to whether, if they were found in India, we should not think it necessary to refer them to a Babylonian origin?

'O Viracocha, Lord of the universe, whether thou art male or female, lord of reproduction, whatsoever thou mayest be, Lord of divination, where art thou? God above, god below, god all around, thy throne and scepter splendid! Oh hear me, whether from the sky above, or from the sea beneath, or wherever thou mayest be. Creator of all the world, maker of all men, lord of all lords, my eyes fail me, longing to see thee; for the sole longing to know thee. O might I behold thee, might I but know thee, might I understand thee! But do thou look upon me, for thou knowest me. The sun and the moon, the day and the night, the summer and winter—verily thou hast not ordained them for naught; but they travel in order to their places, as thou, O my god, hast assigned them; they come to the end that thou hast determined, going whithersoever thou pleasest. Thou holdest the royal scepter (thou art my lord); hear thou me; choose me; keep me from weariness, save me from death.'

So also cries the Vedic poet, 'O wouldest that I might see my

god!' and he, too, admires the unceasing procession of the days and seasons.

A bit from another hymn: 'Wilt thou make known to me who thou really art? Art thou what I thought thee, or art thou a phantom, a thing that makes fear? O could I know it, O could it be shown me! Thou who hast made me of earth and of clay, look thou upon me; old am I, dying; but thou art my maker.'²

Here the parallel is not verbal, but this and the first extract express the tone of those Vedic hymns which are now referred to the West with the idea that they are too lofty for India's thought. I too would refer to the West, but much farther West than Babylon, and refer not the Vedic hymns, but those who think that an Indian (or Hindu) may not also have ideas and emotions and the use of language similar to that of other people when religiously exalted.

This does not imply that it is not quite legitimate to make comparisons when connection is otherwise probable; only that it is temerarious to base connection even on a close similarity.

² Sir Clements R. Markham, *The Incas of Peru*, 1910, p. 100 (from the translation of Miguel Mossi of Bolivia, 1892).

BRIEF NOTES

Indra and other Gods of War and Fertility combined

As a note to my article 'Indra as God of Fertility,' *JAOS* 36, 242-268, I should like to add an example or two of similar deities and at the same time complement the matter of Indra with an account kindly furnished me by Sir George Grierson, of the modern position in Hindu folklore of this husband of 'Indra-rāṇi.'

In American mythology there are numerous examples of gods of thunder and lightning functioning as fertility-gods. Indeed this may be said to be the normal rôle of such deities. The peculiar war-god of the Aztecs is, to be sure, interpreted as a sun-god, Uitzilopochtli, but an older god than this Aztec was the Nahuan Xipe, the yellow god later regarded (because yellow) as the god of goldsmiths. Before his office was so restricted he was the god of the yellow grain, but at the same time he was a god of war. For this reason his sacrificial victims were made to perish by a kind of gladiatorial combat; but when dead their hearts were spread on the ground as fertility-charms. Then again the Nahuan Tlaloc is both god of thunder and lightning and fertility-god and the Mayan Chac, who almost duplicates Tlaloc, is god of thunder and fertility and also war-god, whose feasts however remain fertility-festivals, in which a dog's heart, sacrificed to the god, is magically treated for rain.

In Peru, Inti-allapa or Illapa, as thunder and lightning, carries a club, a sling, and a stone, and his fertility-stones are found all over the country. Like other gods of this sort he is a mountain-god. The raging storm with the hissing lightning easily develops the idea of a war-god, but the rain and the hissing snake, which regularly represents lightning, as easily connect this war-god with fertility. Or rather, the god of fertility appears in the form of a war-god from the beginning. Hence Mars is both at once. It has occurred to me that the Irish Fomorach might owe their doubtful nature to this fact. One school interprets the Fomorach as gods of storm and death; another insists upon it that they are not death-gods but fer-

tility-gods. Why not both in one, as in Germany Woden was god of death and of fertility?

Under date of February 12, 1917, Sir George Grierson writes that, in Behār, village folklore associates Durgā with 'the seven Indras' as their sister. In the cycle of ballads about Lōrik, the hero-son of Durgā, she is represented as making them impotent, that is, depriving them of their natural function as fertility-powers. Durgā in this tale and elsewhere is the goddess who causes impotence. The Indras appear always as a group and are not individualized; their wife is 'Indra-rāni, evidently a corruption of Indrāni.' It is pleasant to learn from the same communication that Sir George Grierson hopes some day to edit and translate this Lōrik cycle.

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A Note on 'The Year's Work in Oriental Archaeology'

In this JOURNAL, vol. 36, page 348, I made the misstatement that the Egyptian Expedition of the Metropolitan Museum in New York had completed its work. This is not the fact; it has continued its work without interruption since the beginning of the war, and will so continue until further notice. The only change in the work is that the staff has been somewhat reduced. It was this fact, together with having heard that Mr. Lythgoe, in charge of the expedition, had returned to America, that made me believe that the work had been concluded, and that the publication of the results had begun. The following statement, coming from the Museum itself, should therefore be borne in mind in this connection:

'The Metropolitan Museum's Egyptian Expedition has prosecuted its main programme in Egypt without interruption since the war began, and is still at work, with its regular appropriation without any disposition to relax its activities. The only change that has been effected in the programme of the expedition since the war began was a slight reduction in the scale of the field work, owing chiefly to the fact that three members of the staff are in the British Army. As is well known, the Egyptian Department of the Metropolitan Museum has been engaged upon an extensive installation of its new Egyptian galleries, and has also embarked upon a very extensive publication programme, of which the first volume of one series has appeared. Thus the enlarged activities of the Egyptian Department of the Museum have been undergoing readjustment to keep pace with the field work.'

Since the publication of my article, an article has appeared to which I would call attention. In Part 1 of the *Museum Journal* of the University Museum in Philadelphia for 1917, there is published a paper by Mr. Clarence Stanley Fisher, called 'Excavations at Gizeh' and describing part of the work of the Eckley B. Coxe, Jr., Expedition to Egypt.

On page 352, footnote 5a, I make the mistake of saying that the volume by Bell is on the *site* of Sardis. This should be changed, of course, to a volume on the coins found there. In the series of the publications on Sardis it is Volume 11, part I. A review of this book will be found in the *Revue Archéologique*, Series V, vol. 4 (1916), p. 323.

STEPHEN BLECKER LUCK, JR.

Museum, University of Pennsylvania

Postage Stamps of the Hijáz



$\frac{1}{4}$ quaser



$\frac{1}{2}$ quaser



1 quaser

Only the briefest reports have percolated into this country of the newly formed independent state of the Hijáz, covering the Holy Territory of Mecca and Medina, the sacred cities of

Islam. That the new state is an accomplished fact is proved documentarily by postage stamps, cuts of which are here reproduced.

The legend at the top of each reads: *barid hijāzī*, 'Hijāz Post'; in the center field is read *makkat al-mukarramah*, 'Mecca the Honorable.' At the bottom is given the denomination, quarter-qursh, half-qursh, and full qursh (*sāgh*, 'at par'). Qursh is the native Arabic word for the Turkish piastre. Further the Hijra date 1334 is given. The respective colors are green, red, and blue. The stamps are beautifully designed and executed.

J. A. M.

PERSONALIA

The death is reported of Dr. ROBERT GAUTHIER, Adjunct Director in the Ecole des Hautes Études, Paris, at the age of 40 years. He died Sept. 11, 1916, from wounds received in action as a captain of infantry. An Iranian philologist, he was particularly known for his labors in the decipherment of the Soghdian dialect. He has left his family in distress, and a committee has been formed to aid them, the American section of which is presided over by Mr. Martin A. Ryerson, Chicago.

Prof. RUDOLPH E. BAUERNHOFER, Assyriologist and Arabist, Professor at Princeton University, died April 14, 1917. He became a member of this Society in 1911.

Prof. A. T. OLMIESTRAD, of the University of Missouri and Secretary-Treasurer of the Western Branch of this Society, has accepted a professorship in History at the University of Illinois, Urbana, Ill., the appointment to go into effect with the next academic year.

THE STORY OF CHANG K'ÍEN, CHINA'S PIONEER IN
WESTERN ASIA

TEXT AND TRANSLATION OF CHAPTER 123 OF SSI-MA
TS'ÍEN'S SHÍ-KI

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INTRODUCTION

The only complete translation of this Chinese text, which is as difficult as it is important, is the French version published by M. Brosset in the *Nouveau Journal Asiatique* (tome 2, Paris, 1828, p. 418-450) under the title 'Relation du pays de Ta-ouen.' Like Abel Rémusat's works on cognate subjects, it was an undertaking of great merit and quite a revelation to the scientific world of its time, ninety years ago; but a comparison with the original Chinese text will convince Sinologues that a new translation, incorporating the greatly modified identifications and interpretations of later research, is an absolute necessity.

In Brosset's translation, misconceptions of the author's statements are unfortunately so frequent that readers anxious for correct historical or geographical information must be warned not to take facts for granted without a thorough scrutiny of the original. To illustrate the dangers besetting scholars unfamiliar with the spirit of the Chinese language, there is perhaps no more instructive example than the first sentence in § 12. There it is said of Chang K'ien, after his visit to Baetria, that, 'having sojourned there fully a year, he returned, skirting the Nan-shan' (cf. § 61: 'all along the Nan-shan'). Not grasping the meaning of the character *ping* (Giles, no. 9282), which, according to Chang Shou-ts'ie's commentary of 737 A. D., is in this case to be read *pang* and has the sense of *lién* (Giles, no. 7109), 'to connect, to adjoin,' the very words of our *pang Nan-shan* passage being quoted in K'ang-hi (Rad. 117: 5, 12) from the *Shí-ki* as an example, M. Brosset translates: 'Après un an de delai, revenant au mont *Ping-nan*,' and adds in a footnote: 'Montagne dans le Tibet.' To guess the meaning of Chinese words from the

mere sound of a transcription without having seen the Chinese characters themselves is a dangerous experiment. Under the sound *ping*, Giles's Dictionary has no less than twenty characters with as many, or more, different meanings; and about as many characters are found under the sound *p'ing* with the aspirated initial. Among the latter we find *p'ing*, 'a plain' (no. 9311). This had apparently induced Baron von Richthofen (*China*, 1. 449, 454) to reproduce Brosset's translation with an additional note saying that 'der Name Ping-nan zeigt, dass das Gebirge im Süden eines ebenen Landstrichs lag.' The *Ts'ién-han-shu* in its biography of Chang K'ién (chap. 61, p. 2) contains a parallel passage, rendered correctly by 'following the southern mountains' in Wylie's version ('Notes on the Western Regions,' in *Journal of the Anthrop. Institute of Great Britain and Ireland*, vol. 10, Feb. 10, 1880, p. 67).

Wylie's timely and highly meritorious contribution toward a much neglected field of study, however, also contains a great many mistranslations, and should in important cases never be used without consulting the original Chinese text. Alexander Wylie, whose name, as Henry Howorth appropriately remarks (*op. cit.* 9. 52), 'is a household word wherever the study of China and its borders is prosecuted,' had been afflicted with a serious breakdown in health, ending in total blindness, just at the time when he yielded to Howorth's persuasion to take in hand his translation from the *Ts'ién-han-shu* for the Anthropological Institute. On the whole his work gives a fair idea of the subject; but a revision of it will, sooner or later, have to be undertaken.

It is necessary to use the greatest caution in consulting the late T. W. Kingsmill's paper, first published in the *Journal of the China Branch of the R. A. S.*, new ser. 14. 1-29, under the title 'The Intercourse of China with Central and Western Asia in the 2d Century B. C.', and reprinted in *JRAS*, new ser. 14. 74-104, under the title 'The Intercourse of China with Eastern Turkestan and the Adjacent Countries.'

I have prepared the present new translation primarily in order to get a clear idea of the material which will have to serve as an introduction to renewed studies required for a second edition of my book *China and the Roman Orient*, published in 1885; and I now place it before students of Oriental history and

Chinese literature with the hope that they may improve my rendering and interpretation by their criticisms. Of Professor Edouard Chavannes' gigantic work, the translation of the *Shi-ki* (*Les Mémoires historiques de Ssī-ma Ts'ien traduits et annotés*, Paris, Leroux, tomes 1-5, 1895-1905), only five volumes have appeared, carrying us to Ssī-ma Ts'ien's chapter 47; and some considerable time may elapse before the publication of chapter 123 (cf. Chavannes' Synoptic Table of chapters in the *Shi-ki* and the *T'ung-kién-kang-mu*, vol. 1, pages ccxlii-ccxliii of his Introduction). In the meantime I would refer readers to this scholar's admirable critical essay on the Chinese historian's work, in his Introduction, pages i-ccxlii. It will be seen from Chavannes that we are not able to fix the exact year of the death of Ssī-ma Ts'ien; but, in all probability, the great work which has earned for him the title of 'the Herodotus of China' must have been completed about the year 99 a. c. (p. xliv), perhaps even a few years later, to give him time for the despatch of ten embassies to the Far West after the appointment, in 100 a. c., of Ch'an-fōng as King of Ta-yüan. His father, Ssī-ma T'an, who, like himself, held the post of court astrologer, and who, besides having conceived the plan of writing the *Shi-ki*, may be responsible for certain portions of that work, had died in 110 a. c. (p. xxxiv, note). It follows, therefore, that he cannot have had any connection with that part of our Ta-yüan chapter which deals with facts lying beyond that date; and if Ssī-ma, the father, has been at all concerned in drafting portions of our text, his co-operation is not likely to have extended beyond its first half—say paragraphs 1 to 79 of the present translation—which I am inclined to look upon as being based chiefly on Chang K'ien's original report to the Emperor.

The Imperial Library of the Sui dynasty, to judge from its Catalogue (*Sui-shu*, chap. 33, p. 23 B), contained a book in one chapter entitled *Chang-k'ien-ch'u-kuan-chi*, i. e. 'Account of Chang K'ien's Expeditions Abroad,' which has apparently not been handed down to later periods, since it is not mentioned in the Catalogues of the T'ang and Sung dynasties, though Chang Tsung-yüan, in his *Sui-king-tsi-chi-k'au-chōng*, chap. 6, p. 46, says that the title is quoted in the chapter on foreign coins in Hung Tsun's work, the *Ts'üan-chi*, published in 1149 a. d. But this may be a secondhand quotation. I place greater confidence

in a reference to it in the *Ku-kin-chu* (chap. 3, p. 3), where the grape is referred to as having been introduced into China by Chang K'ién. From what the critics in the great Catalogue of the Imperial Library of Peking (*Tsung-mu*, 118, p. 4) say in connection with an analysis of the *Ku-kin-chu* text, this paragraph must have been written during the Tsim dynasty, about 300 A. D., when Tsui Pau, the compiler of the older and original text now known as the *Ku-kin-chu*, apparently preferred the *Chang-k'ién-ch'u-kuan-chi* to the *Shi-ki* as an authority. Since no author's name is mentioned in connection with the title, this *chi*, or memoir, may go back to Chang K'ién's own Report. It is, however, not quoted in the *Tai-min-yau-shu* (about 500 n. c.; see my notice of it in *T'oung Pao*, 6, 436-440, and Bretschneider, *Botanicon Sinicum*, 1, 77 ff.), where a number of foreign plants not referred to in our *Shi-ki* account, such as the pomegranate (*Pu-lin* = Ind. *darim*), *sesamum orientale*, garlic, and *coriandrum sativum*, are distinctly stated to have been introduced into China by Chang K'ién. These and other cultural wanderings are there quoted from various older works, partly lost. Altogether Chinese literature throws considerable light on such subjects as have been treated for Europe in Hahn's *Kulturpflanzen und Haustiere*. A great many plants and animals were brought to China, either by Chang K'ién himself or by later expeditions sent by Wu-ti and his successors. Of these, certain breeds of the horse, also the vine and the lucerne, are the only ones referred to in the *Shi-ki*. Nevertheless, the one hero who must be looked upon as the pioneer of all that came from the West was Chang K'ién, whose return to China in 126 n. c. opened a new epoch in the development of Chinese civilization. Another work which, I am led to believe from Bretschneider's *Botanicon Sinicum* (1, 25), was at some time or other ascribed to Chang K'ién himself, is the *Hai-wai-i-wu-ki*, i. e. 'Record of Remarkable Things beyond the Seas.' The title does not, however, seem very descriptive of the account of an overland expedition like Chang K'ién's.

I have in the present translation and in the accompanying Index rendered the several geographical terms occurring in the Chinese text by their Western equivalents, as accepted by most present-day Sinologues, without entering upon the arguments which have in the course of a century brought about so many

important changes since the time of Deguignes and Rémusat. Readers may, however, consult with advantage two papers closely related to our subject: S. K. Shiratori, 'Ueber den Wu-sun-Stamm in Centralasien' in *Keleti Szemle*, 3 (1902), p. 103-140, and O. Franke, 'Beiträge aus chinesischen Quellen zur Kenntniss der Türkvölker und Skythen Zentralasiens' in *Abhandlungen der Kgl. Preuss. Akademie der Wissensch.*, 1904, Anhang.

The Chinese text reproduced is that of the K'ién-lung edition of 1739. It has been compared with the original by Mr. T. Y. Leo, late Secretary of the Chinese Legation in Washington, D. C., a son of Liu Si-hung, the first Chinese envoy appointed to Germany (Giles, *Chinese Biogr. Dict.*, no. 1299), and one of the few native scholars taking real interest in Western research in Chinese literature, to whom I am also indebted for many valuable suggestions in connection with my translation.

TRANSLATION*

(1) Our first knowledge of Ta-yüan [Ferghana] dates from Chang K'ién. (2) Chang K'ién was a native of Han-chung [in the south of Shen-si province]; during the period of K'ién-yüan [140-134 n. c.] he was a *long* [a titular officer of the imperial household; a yeoman]. (3) At that time the Son of Heaven made inquiries among these Hiung-nu who had surrendered [as prisoners] and they all reported that the Hiung-nu had overcome the king of the Yüé-chī and made a drinking-vessel out of his skull. The Yüé-chī had decamped and were hiding somewhere, all the time scheming how to take revenge on the Hiung-nu, but had no ally to join them in striking a blow. (4) The Chinese, wishing to declare war on and wipe out the Tartars, upon hearing this report, desired to communicate with the Yüé-chī; but, the road having to pass through the territory of the Hiung-nu, the Emperor sought out men whom he could send. Chang K'ién, being a *lang* [cf. § 2], responded to the call and enlisted in a mission to the Yüé-chī; he took with him one

* The numbers in parentheses indicate the sections similarly numbered in the text as reproduced herewith.

Kan Fu, a Tartar, formerly a slave of the T'ang-i family, and set out from Lung-si [Kan-su], crossing the territory of the Hiung-nu. (5) The Hiung-nu made him a prisoner and sent him to the *Shan-yü* [Great Khan, or King], who detained him, saying: 'The Yüé-chi are to the north of us; how can China send ambassadors to them? If I wished to send ambassadors to Yüé [Kiangsi and Ch'ükiang], would China be willing to submit to us?' He held Chang K'ién for more than ten years, and gave him a wife, by whom he had a son. (6) All this time Chang K'ién had kept possession of the Emperor's token of authority, and, when in the course of time he was allowed greater liberty, he, watching his opportunity, succeeded in making his escape with his men in the direction of the Yüé-chi. (7) Having marched several tens of days to the west, he arrived in Ta-yüan. The people of this country, having heard of the wealth and fertility of China, had tried in vain to communicate with it. (8) When, therefore, they saw Chang K'ién, they asked joyfully: 'Where do you wish to go?' Chang K'ién replied: 'I was sent by [the Emperor of] China to the Yüé-chi, and was made prisoner by the Hiung-nu. I have now escaped them and would ask that your king have some one conduct me to the country of the Yüé-chi; and if I should succeed in reaching that country, on my return to China, my king will reward yours with untold treasures. (9) The Ta-yüan believed his account and gave him safe-conduct on postal roads to K'ang-kü [Soghdiana], and K'ang-kü sent him on to the Ta-yüé-chi. (10) The king of the Ta-yüé-chi having been killed by the Hu ['Tartars'; in this case the Hiung-nu], the people had set up the crown prince in his stead [in the *Ts'ién-han-shu* it is the queen who is appointed his successor]. They had since conquered Ta-hia [Bactria] and occupied that country. The latter being rich and fertile and little troubled with robbers, they had determined to enjoy a peaceful life; moreover, since they considered themselves too far away from China, they had no longer the intention to take revenge on the Hu [Hiung-nu]. (11) Chang K'ién went through the country of the Yüé-chi to Ta-hia [Bactria], yet, after all, he did not carry his point with the Yüé-chi. (12) After having remained there fully a year, he returned, skirting the Nan-shan. He wished to return through the country of the K'iang [Tangutans], but was again made a prisoner by the Hiung-nu, who detained him for more than a year, when the

Shan-yü died and the 'left' Luk-li [possibly Turk. *Ulugla*, 'highly honored'] prince attacked the rightful heir and usurped the throne, thus throwing the country into a state of confusion. At this time Chang K'ién, with his Tartar wife and T'ang-i Fu [i. e. Kan Fu, see above, § 4], escaped and returned to China.

(13) [The Emperor of] China appointed Chang K'ién a *T'ai-chung-ta-fu* ['Imperial Chamberlain'] and gave T'ang-i Fu the title *Fōng-shi-kün* ['The Gentleman attending the Embassy'].

(14) Chang K'ién was a man of strong physique, magnanimous and trustful, and popular with the foreign tribes in the south and west. (15) T'ang-i Fu was formerly a *Hu* [Tartar; Hiung-nu†]. Being an excellent bowman, he would, when supplies were exhausted, provide food by shooting game. (16) When Chang K'ién started on his journey, his caravan consisted of more than a hundred men; thirteen years later, only two lived to return. (17) The following countries were visited by Chang K'ién in person: *Ta-yüan* [Ferghana], *Ta-yüé-chi* [Indoscythians], *Ta-hia* [Bactria], and *K'ang-kü* [Soghdiana]; there were besides, five or six other large adjacent countries concerning which he gained information and on which he reported to the Emperor in the following terms.

(18) *Ta-yüan* [Ferghana] is to the southwest of the Hiung-nu and due west of China, at a distance of about 10,000 *li*. (19) The people are permanent dwellers and given to agriculture; and in their fields they grow rice and wheat. They have wine made of grapes (*p'u-t'au*) and many good horses. The horses sweat blood and come from the stock of the *t'ién-ma* [heavenly horse, perhaps the wild horse]. (20) They have walled cities and houses; the large and small cities belonging to them, fully seventy in number, contain an aggregate population of several hundreds of thousands. (21) Their arms consist of bows and halberds, and they shoot arrows while on horseback. (22) North of this country is *K'ang-kü* [Soghdiana]; in the west are the *Ta-yüé-chi*; in the southwest is *Ta-hia* [Bactria]; in the northeast are the *Wu-sun*; and in the east *Han-mi* and *Yü-tién* [Khotan]. (23) All the rivers west of *Yü-tién* flow in a westerly direction and feed the Western Sea; all the rivers east of it flow east and feed the Salt Lake [Lopnor]. The Salt Lake flows underground. To the south of it [*Yü-tién*] is the source from which the *Ho* [the Yellow River] arises. The country contains much jadestone.

The river flows through China; and the towns of Lóu-lan and Ku-shí with their city walls closely border on the Salt Lake. The Salt Lake is possibly 5000 *li* distant from Chang-an. (24) The right [i. e. western] part of the Hiung-nu live to the east of the Salt Lake as far as the great wall in Lung-si. To the south they are bounded by the K'iang [Tangutans], where they bar the road [to China].

(25) Wu-sun may be 2000 *li* northeast of Ta-yüan; its people are nomads [following their flocks of cattle], and have the same customs as the Hiung-nu. Of archers they have several tens of thousands, all daring warriors. (26) Formerly they were subject to the Hiung-nu, but they became so strong that, while maintaining nominal vassalage, they refused to attend the meetings of the court.

(27) *K'ang-kü* [Soghdiana] is to the northwest of Ta-yüan, perhaps 2000 *li* distant. It also is a country of nomads with manners and customs very much the same as those of the Yüé-chi. They have eighty or ninety thousand archers. The country is coterminous with Ta-yüan. It is small. In the south it is under the political influence of the Yüé-chi; in the east, under that of the Hiung-nu.

(28) *An-is'oi* [Aorsi] lies to the northwest of *K'ang-kü*, perhaps at a distance of 2000 *li*. It is a nomad state, and its manners and customs are in the main identical with those of *K'ang-kü*. It has fully a hundred thousand archers. The country lies close to a great sea [*ta-tsō*, lit. 'great marsh,' the Palus Maeotis, i. e. the Sea of Azov] which has no limit, for it is the Northern Sea.

(29) The *Ta-yüé-chi* [Indoseythians] are perhaps two or three thousand *li* to the west of Ta-yüan. They live to the north of the *K'ui-shui* [Oxus]. South of them is *Ta-hia* [Bactria]; in the west is *An-si* [Parthia]; in the north, *K'ang-kü* [Soghdiana]. They are a nomad nation, following their flocks and changing their abodes. Their customs are the same as those of the Hiung-nu. They may have from one to two hundred thousand archers. In olden times they relied on their strength, and thought lightly of the Hiung-nu; but when Mau-tun ascended the throne he attacked and defeated the Yüé-chi. Up to the time when Lau-shang, *Shan-yü* of the Hiung-nu, killed the king of the Yüé-chi and made a drinking vessel out of his skull, the

Yüé-chi had lived between Tun-huang [now Sha-chou] and the K'i-lién [a hill southwest of Kan-chou-fu], but when they were beaten by the Hiung-nu, they fled to a distant country and crossed to the west of Yüan [Ta-yüan], attacked Ta-hia [Bactria], and conquered it. Subsequently they had their capital in the north of the K'ui-shui [Oxus] and made it the court of their king. The minority which were left behind and were not able to follow them, took refuge among the K'iang [Tangutans] of the Nan-shan, and were called Sian-Yüé-chi (Small Yüé-chi).

(30) An-si [Parthia] may be several thousand *li* west of the Ta-yüé-chi. (31) The people live in fixed abodes and are given to agriculture; their fields yield rice and wheat; and they make wine of grapes. (32) Their cities and towns are like those of Ta-yüan. (33) Several hundred small and large cities belong to it. (34) The territory is several thousand *li* square; it is a very large country and is close to the K'ui-shui [Oxus]. (35) Their market folk and merchants travel in carts and boats to the neighboring countries, perhaps several thousand *li* distant. (36) They make coins of silver; the coins resemble their king's face. Upon the death of a king the coins are changed for others on which the new king's face is represented. (37) They paint [rows of charmers] running sideways on [stiff] leather, to serve as records. (38) West of this country is T'isu-chi; north, is An-ts'ai.

(39) Li-kan [Syria] and T'iou-chi [Chaldea] are several thousand *li* west of An-si and close to the Western Sea. (40) It [referring to T'iou-chi] is hot and damp. (41) The inhabitants plow their fields, in which they grow rice. (42) There is a big bird with eggs like jars. (43) The number of its inhabitants is very large, and they have in many places their own petty chiefs; but An-si [Parthia], while having added it to its dependencies, considers it a foreign country. (44) They have clever jugglers. (45) Although the old people in An-si maintain the tradition that the Jo-shui and the Si-wang-mu are in T'iou-chi, they have not been seen there.

(46) Ta-hia [Bactria] is more than 2000 *li* to the southwest of Ta-yüan, on the south bank of the K'ui-shui [Oxus]. (47) The people have fixed abodes and live in walled cities and regular houses like the people of Ta-yüan. (48) They have no great

king or chief, but everywhere the cities and towns have their own petty chiefs. (49) While the people are shrewd traders, their soldiers are weak and afraid to fight, so that, when the Ta-yüé-chī migrated westward, they made war on the Ta-hia, who became subject to them. (50) The population of Ta-hia may amount to more than a million. (51) Their capital is called Lan-shí, and it has markets for the sale of all sorts of merchandise. (52) To the southeast of it is the country of Shön-tu [India]. (53) Chang K'ien says [in his report to the Emperor]: 'When I was in Ta-hia, I saw there a stick of bamboo of Kiung [Kiung-ch'ou in Ssēi-ch'nan] and some cloth of Shu [Sséi-ch'uan]. When I asked the inhabitants of Ta-hia how they had obtained possession of these, they replied: "The inhabitants of our country buy them in Shön-tu [India]."' Shön-tu may be several thousand *li* to the southeast of Ta-hia. The people there have fixed abodes, and their customs are very much like those of Ta-hia; but the country is low, damp, and hot. The people ride on elephants to fight in battle. The country is close to a great river. According to my calculation, Ta-hia must be 12,000 *li* distant from China and to the southwest of the latter. Now the country of Shön-tu being several thousand *li* to the southeast of Ta-hia, and the produce of Shu [Sséi-ch'uan] being found there, that country cannot be far from Shu. Suppose we send ambassadors to Ta-hia through the country of the K'iang [Tangutans], there is the danger that the K'iang will object; if we send them but slightly farther north, they will be captured by the Hiung-nu; but by going by way of Shu [Sséi-ch'uan] they may proceed direct and will be unmolested by robbers.'

(54) The Son of Heaven on hearing all this reasoned thus: Ta-yüan and the possessions of Ta-hia and An-si are large countries, full of rare things, with a population living in fixed abodes and given to occupations somewhat identical with those of the Chinese people, but with weak armies, and placing great value on the rich produce of China; in the north the possessions of the Ta-yüé-chī and K'ang-kü, being of military strength, might be made subservient to the interests of the court by bribes and thus gained over by the mere force of persuasion. In this way a territory 10,000 *li* in extent would be available for the spread among the four seas of Chinese superior civilization by communicating through many interpreters with the nations holding

widely different customs. As a result the Son of Heaven was pleased to approve Chang K'ién's proposal.⁽⁵⁵⁾ He thereupon gave orders that, in accordance with Chang K'ién's suggestions, exploring expeditions be sent out from Kién-wei of the Shu kingdom [the present Sū-chóu-fu on the Upper Yangtzi] by four different routes at the same time: one to start by way of Mang; one by way of Jan [both names referring to barbarous hill tribes on the southwestern frontier; cf. *Shi-ki*, chap. 116, p. 2]; one by way of Ssī [or Si]; and one by way of Kiung [Küng-chóu in Ssī-ch'uan] and P'o [the present Ya-chóu].⁽⁵⁶⁾ These several missions had each traveled but one or two thousand *li* when those in the north were prevented from proceeding farther by the Ti and Tsō tribes, and those in the south by the Sui and K'un-ming tribes [placed by the commentators in the southwest of Sū-chóu-fu], who had no chiefs and, being given to robbery, would have killed or captured the Chinese envoys.⁽⁵⁷⁾ The result was that the expeditions could not proceed farther. They heard, however, that about a thousand *li* or more to the west there was the 'elephant-riding country' called Tién-yüé [possibly meaning 'the Tién,' or Yünnan, part of Yüé or South China], whither the traders of Shu [Ssī-ch'uan] were wont to proceed, exporting produce surreptitiously. Thus it was that by trying to find the road to Ta-hia [Bactria] the Chinese obtained their first knowledge of the Tién country (Yünnan).

(58) The original idea to penetrate from China through the country of the southwestern barbarians was abandoned, because, in spite of the heavy expense incurred, the passage could not be effected; but it was in pursuance of Chang K'ién's report regarding the possibility of finding a road to Ta-hia [Bactria] that attention had again been drawn to these barbarians. It had been due to Chang K'ién's knowledge of their pasture-grounds, when following, in the capacity of a subcommander, the general-in-chief sent out against the Hiung-nu, that the army did not fall short of provisions. For this the Emperor invested him with the title 'Marquis of Po-wang.' This was in the year 123 a. c.⁽⁵⁹⁾ When, in the following year, Chang K'ién took part in the Yu-pei-p'ing [about 80 miles east of Peking] campaign against the Hinng-nu in the capacity of a commander of the Guards under General Li [Li Kuang, according to *Ts'ien-han-shu*, chap. 61, p. 4] as commander-in-chief and the latter was blocked

by the enemy with considerable losses to his army, Chang K'ién failed to come soon enough to the rescue. For this he was liable to the penalty of death; but, on payment of a ransom, his punishment was reduced to degradation to the rank of a private. (60) In the same year China sent the Piao-ki general (Ho K'ü-ping) to conquer the western *ordu* [capital] of the Hsiung-nu. He took several tens of thousands [of troops] and pushed forward as far as the K'i-lién-shan [a hill in the south of the present Kan-chou-fu]. (61) In the following year (121 a. c.) the Hun-shō prince with all his people tendered his allegiance to China, and in the west of Kin-ch'ōng [Lan-chón-fu] and in Ho-si [in the west of Kan-su] all along the Nan-shan as far as the Salt Lake [the Lopnor] there remained no Hsiung-nu. The Hsiung-nu would from time to time come there to waylay travelers, but such visitations were of rare occurrence indeed, and two years later the Chinese forced their khan to retreat into the north of the desert. The Son of Heaven therenpon consulted Chang K'ién several times about Ta-hia and other countries, and since K'ién had lost his marquisate he submitted the following report:

(62) 'When your servant was living among the Hsiung-nu, he heard that the king of the Wu-sun was styled *K'un-mo*, and that the *K'un-mo*'s father was [chief of] a petty state on the western borders of the Hsiung-nu. The Hsiung-nu attacked and killed his father, and the *K'un-mo*, at his birth, was cast away in the wilderness, where meat was brought to him by a blackbird and a she-wolf nursed him with her milk. (63) The Shan-yü [khan of the Hsiung-nu] regarded this as a wonder and, having raised the child to manhood, made him a military leader, in which capacity he distinguished himself on several occasions. (64) The Shan-yü restored to him the people of his father and made him governor of the western *ordu* [city, or fortified camp]. On receiving charge of his people, the *K'un-mo* attacked the neighboring small states with tens of thousands of bowmen, gained experience in warfare, and, after the Shan-yü's death, withdrew his forces to a distant retreat, declining to appear at the court of the Hsiung-nu. (65) The latter dispatched a force of picked troops to attack him, but, being unable to conquer him, regarded him as a spirit whom they had better keep at a distance and whom they would not seriously attack, though they con-

tinued to claim [nominal] jurisdiction of the Shan-yü over the K'un-mo. (66) Now the Shan-yü has recently been defeated by China, in consequence of which the Hun-shö prince's former territory has become deserted; and since the barbarians covet the rich products of China, this is an opportune time to bribe the Wu-sun with liberal presents, and to invite them to settle farther east in the old Hun-shö territory. Should they become attached to the Chinese as a brother nation by intermarriage, the situation would be in favor of their listening to our proposition, and if they do this, it would be tantamount to the cutting off of the right [i. e. western] arm of the Hiung-nu nation. Once we are connected with the Wu-sun, the countries to the west of them might be invited to come to us as outer subjects.'

(67) The Son of Heaven approved of Chang K'ién's proposal and appointed him a commander in his bodyguard as well as leader of an expedition consisting of 300 men, each with two horses, and oxen and sheep in myriads. He also provided him with gifts of gold and silk stuffs worth millions, and with assistant envoys, holding credentials, whom he might send to and leave behind in other nearby countries. (68) When Chang K'ién arrived at Wu-sun, he keenly resented the humiliation offered to him, the ambassador of China, by a mere king of the Wu-sun, K'un-mo, in receiving him in audience with court ceremonial like that adopted with the Shan-yü of the Hiung-nu. Knowing the greed of these barbarians, he said: 'If the king does not pay due respect to these gifts, which have come from the Son of Heaven, they will be withdrawn.' The K'un-mo rose and offered obeisance before the gifts, but all other ceremonies passed off as of old. (69) Chang K'ién explained the Emperor's ideas as follows: 'If the Wu-sun are able to move eastward to the country of the Hun-shö, China will send a princess to become the K'un-mo's consort.' (70) The Wu-sun country was divided, for the King was old and, considering China very distant and being unaware of its greatness, had heretofore submitted to the Hiung-nu, and this for a long time indeed. Moreover, his own country was also nearer them, so that his ministers, who were afraid of the Tartars, did not wish to move away, and, since the king was not free to arrive at a decision of his own choice, Chang K'ién was unsuccessful in inducing him to adopt his suggestion.

(71) The K'un-mo had more than ten sons, the second of whom, called Ta-lu, was an energetic leader of the masses. In this capacity he set himself up in a separate part of the country with more than ten thousand horsemen. Ta-lu's elder brother, the crownprince, had a son called the *Ts'ön-ts'ü* [according to *Ts'ien-han-shu*, chap. 96 B, p. 3, a title]. When the crownprince met with an early death, his last words to his father, the K'un-mo, were: 'Let the *Ts'ön-ts'ü* become crownprince, and do not allow any other man to take his place.' The K'un-mo, in his grief, consented; and so on the death of his father the *Ts'ön-ts'ü* became crownprince. Ta-lu was angry at being prevented from acting as crownprince and, having imprisoned his brothers, rose with his people in rebellion against the *Ts'ön-ts'ü* and the K'un-mo. The latter, being old, was in constant fear that Ta-lu might kill the *Ts'ön-ts'ü*; he therefore gave the latter more than ten thousand horsemen to settle elsewhere, while retaining the same number of horsemen for his own protection.

The population was thus divided into three parts; and, notwithstanding that the majority were under his authority, the K'un-mo did not dare to take it upon himself to conclude that treaty with Chang K'ién. (72) Chang K'ién, therefore, sent assistant ambassadors in several directions to the countries of Ts'-yuan [Ferghana], K'ang-kü [Soghdiana], Ta-yüé-chi [Indo-scythians], Ta-hia [Bactria], An-si [Parthia], Shöö-tu [India], Yü-tién [Khotan], Han-mi [1] and the adjacent territories. (73) Wu-sun furnished guides and interpreters to accompany Chang K'ién on his return, and the latter, traveling with several dozen natives and as many horses sent by the people of Wu-sun in acknowledgment [of the Emperor's gifts], thereby afforded them the opportunity to see China with their own eyes and thus to realize her extent and greatness. (74) On his return to China, Chang K'ién was appointed *Ta-king* ['Great Traveler,' or head of the office of foreign affairs] with rank as one of the nine ministers of state. (75) More than a year after this he died.

(76) The envoys of Wu-sun, having seen that China was a very populous and wealthy country, reported to this effect on their return home, and this increased the estimation in which she was held there. (77) More than a year later, some of the envoys whom Chang K'ién had sent to the Ta-hia countries

returned with natives of those countries, and after this the countries of the Northwest began to have intercourse with China. Since Chang K'ién had been the pioneer in such intercourse, envoys proceeding to the West after him always referred to the Marquis of Po-wang as an introduction in foreign countries, the mention of his name being regarded as a guaranty of good faith. (78) After the death of K'ién, the Hiung-nu heard of China's relations with Wu-sun, at which they became angry and wished to make war on it. When China sent missions to Wu-sun, her ambassadors continually passed through the south of that country to Ta-yüan [Ferghana] and Ta-yüé-chi [Indoscythians], and since the people of Wu-sun were afraid, they sent ambassadors and tribute horses, expressing their wish to bring about family relations by marriage with a Chinese imperial princess. The Son of Heaven consulted his ministers, who all said: 'Let them first offer marriage gifts and we shall then send the maiden.' (79) At first the Son of Heaven consulted an oracle in the 'Book of Changes,' which said that 'the divine horse will come from the northwest.' The horses received from Wu-sun were termed 'heavenly horses,' but when the 'blood-sweating [*han-hüé*] horses' obtained from Ta-yüan [Ferghana] were found much stronger, the name 'Wu-sun horses' was changed to '[horses of the] extrema west,' and the Ta-yüan horses were called 'heavenly horses.'

At this time China began to build the great wall to the west of Ling-kü [near the present Liang-chón-fu in Kan-su], and first established the district of Tsin-ts'üan, through which one could reach the countries of the Northwest. Thus more embassies were despatched to An-si [Parthia], An-ts'ai [the Aorsi, or Alans], Li-kan [Syria under the Seleneids], T'ian-chi [Chaldea], and Shōn-tu [India], and as the Son of Heaven had such a fancy for the horses of Ta-yüan, ambassadors [sent to procure these horses] followed upon one another's heels all along the route. Such missions would be attended by several hundred men, or by a hundred men, according to their importance. The gifts carried by them emulated in the main those sent in the time of the Marquis of Po-wang; but later on, when they had ceased to be a novelty, they were made on a smaller scale. As a rule, rather more than ten such missions went forward in the course of a year, and at the least five or six.

Those sent to distant countries would return home after eight or nine years, those to nearer ones, within a few years.

(80) This was the time when China had extinguished Yüé,¹ in consequence of which the barbarians in the southwest of Shu (Ssü-eh'uan) became alarmed and asked that Chinese officers be appointed, and attended court. Thus were created the districts of I-chōu, Yüé-sni, Tsang-ko, Shōn-li, and Wön-shan, [the government] being guided by the wish that these territories should form a link in the development of the route to Ta-hia [Bactria].

(81) And so the envoys Pai Shih-ch'ang and Lü Yüé-jün were sent out in more than ten parties in a single year from these newly founded districts for Ta-hia [Bactria], but again and again they were held up by the K'un-ming tribes, who killed them and robbed them of the presents they carried, so that they were never able to reach Ta-hia. (82) Thereupon China raised an army from the convicts of the metropolitan district (*san-fu*; cf. *Ts'ien-han-shu*, chap. 76, p. 18, and other quotations in *Pien-tzü-lei-pien*, chap. 91, p. 9 B) and sent the two generals Kuo Ch'ang and Wei Kuang in command of tens of thousands of soldiers of Pa and Shu [Ssi-ch'uan], to fight the K'un-mings who had intercepted the Chinese ambassadors,² when several tens of thousands of the tribesmen were beheaded or made prisoners by the Chinese army before it withdrew. (83) After this ambassadors sent to the K'un-ming were again robbed, and a passage through this country was still found to be impracticable.

(84) On the other hand, missions to Ta-hia [Bactria] by the northern route, via Tsiu-ts'üan, had by their frequency caused the foreign countries to be less and less interested in the Chinese ambassadorial gifts, which they no longer appreciated. (85) Since the work of the Marquis of Po-wang in preparing the way for intercourse with foreign countries had earned for him rank and position, officials and attendants who had accompanied him vied with one another in presenting to the

¹ Clearly referring to Nan-yüé, South China, conquered by General Lu Po-tō in 112 a. c., Hirth, *Chines. Ansichten über Bronzeturmeln*, p. 30. Cf. Mayers, *Chinese Reader's Manual*, p. 138, and Giles, *Chinese Biog. Dict.*, p. 548, who both give the year as 120 a. c.

² A footnote by the scholar Sū Kuang, who died 425 a. d., refers this expedition to the year 109 a. c.

throne memorials in which they discussed the wonders, advantages, and disadvantages of certain foreign countries; and when the memorialists asked to be nominated as envoys, the Son of Heaven, on account of the extreme distance of the countries to be visited and owing to the scarcity of men expressing a willingness to go, would comply with such requests and would even provide credentials to candidates for ambassadorial posts without asking any questions as to whence they had come. In order to encourage enterprise in this direction numbers of embassies were fitted out and sent forward, though among those who returned there were bound to be some who had either purloined the presents entrusted to them or failed to carry out the imperial instructions.

The Son of Heaven on account of the experience of these quasi-envoys, would merely investigate cases as being highly criminal and punishable in order to stir up a feeling of resentment. By causing them to atone for their guilt [by payments?] they were led to apply again for ambassadorial appointments. Chances for such appointments now becoming numerous, those concerned in them made light of infringements of the law, and the lower officials connected with them would also give exaggerated accounts of the conditions of the foreign countries in question. Those who reported on some great projects in connection with foreign countries would be given plenipotentiary posts, whereas reports on less important ones would be rewarded with mere assistantships, for which reason reckless and unprincipled men became eager to follow examples thus set. The ambassadors, being mostly sons of poor families, appropriated the gifts sent by the government, and would undersell them for their private benefit. Foreign countries, in their turn, got tired of the Chinese ambassadors, whose tales consisted of conflicting accounts.²² They

²² Mr. T. Y. Lee remarks in connection with the above sentence: 'This is the interpretation by Fu K'ien [2d century A. D.]. According to Ju Shun [as quoted in a scholium to our passage] the passage would read: "The foreign countries in their turn got tired of the Chinese ambassadors, for many men [of the foreign countries] had complained that each had been more or less cheated and insulted several times by the Chinese." Judging by what follows, I am inclined to think the latter interpretation is the more logical. Ju Shun was a scholar of the Wei Kingdom of the San-kuo period [3d century A. D.].'

imagined that a Chinese army would not be near enough to reach them, and that they were free to annoy the Chinese ambassadors by cutting off their food supplies. The ambassadors were thus reduced to a state of starvation, and their exasperation took the form of actual hostilities. Lóu-lan and Ku-shí, which, though merely small countries, were thoroughfares to the West, attacked and robbed the Chinese ambassadors [Wang K'ui and others] more than ever, and unexpected troops of the Hiung-nu would at all times intercept westbound envoys. Ambassadors would therefore strive to outvie one another in spreading reports of the calamities threatening China from those foreign countries, which had walled cities and towns, but whose armies were weak and could easily be vanquished.

(86) On this account the Son of Heaven sent the Tsung-pian marquis [*Chau*] Po-nu to lead some tens of thousands of cavalry of the feudal states and regular troops toward the Hiung-nu River, wishing to engage the Tartars, but the latter retreated without giving battle. (87) In the following year Po-nu attacked Ku-shí. He took the lead with more than seven hundred light cavalry, captured the king of Lóu-lan, and defeated Ku-shí. He then displayed the prestige of his army in order to 'corner' Wu-sun, Ta-yilan, and other countries. On his return, he was raised to the rank of a marquis of Tso-yé.² (88) Wang K'ui, who had been repeatedly ill-treated as an ambassador by Lóu-lan, had reported this to the Son of Heaven, who raised an army and ordered him to assist Po-nu in bringing Lóu-lan to terms. For this, Wang K'ui was made Marquis of Hau.³ (89) A line of military stations was now established between Tsui-ts'ian and the Yü-món Gate. (90) Wu-sun now presented a marriage gift of a thousand horses, upon which China sent a relative of the emperor's, the Princess of Kiang-tu, as a consort for the king of the Wu-sun. The latter, the K'un-mo, appointed her his right [i. e. less-honored] consort. The Hiung-nu, on their part, also sent a daughter in marriage to the K'un-mo, who appointed her his left [i. e. most-honored] consort. The K'un-mo said 'I am old,' and he induced his grandson, the Ts'ün-is'ü, to marry the [Chinese] princess.

² A footnote says that this happened in the year 108 B. C.

³ According to a footnote, in 107 B. C.

(91) The Wu-sun had great store of horses; rich men had as many as four or five thousand each.

(92) Once, when a Chinese ambassador had come to An-si [Parthia], the king of that country caused twenty thousand horsemen to welcome him at the eastern frontier, which was several thousand *li* distant from the royal capital. When he reached the capital he found that he had passed some dozens of walled cities, densely populated. When the ambassador returned to China they, in their turn, sent envoys to accompany the mission back to China, in order that they might see China's greatness with their own eyes. They offered as tribute big birds' eggs [ostrich eggs] and jugglers from Li-kan [Syria, etc.]. And the small countries to the west of Yüan, namely Huan, Ts'ien, and Ta-i [1], and those to the east of Yüan, namely, Ku-shi, Han-mi, Su-hié, and others, followed the Chinese ambassadors with tribute and had audience with the Son of Heaven, who was thereby highly gratified. (93) Also, a Chinese ambassador traced the source of the Ho River, which had its rise in Yü-tien [Khotan]. The hills there yielded great quantities of jadestone, picked up and brought to China [by the ambassadors]. (94) The Son of Heaven, in accordance with old maps and books, gave the name of K'un-lun to the hill in which the Ho River had its source.

(95) At this time the Emperor often made tours of inspection to the seaside, when he was generally accompanied by numbers of foreign guests, upon whom he would bestow abundant provisions, in order to impress them with the wealth of China. On such occasions crowds of onlookers were attracted by the performances of wrestlers, mummers, and all such wonderful entertainments, and by lavish feasts of wine and meat, by which the foreign guests were made to realize China's astounding greatness. They were also made to inspect the several granaries, stores, and treasures, with a view to showing them the greatness of China and to inspiring them with awe. Later on the skill of these jugglers, wrestlers, mummers, and similar performers was further developed, their efficiency was increased from year to year. (96) It was from this period that the coming and going of ambassadors of the foreign countries of the northwest became more and more frequent. (97) The countries west of Yüan [Ferghana], which, being of the opinion that they were too far away from

China, had as yet calmly stood upon their national pride, could not be won over by our polite civilization into a state of vassalage. (98) Westward from Wu-sun as far as An-si [Parthia], the Hsiung-nu lived nearby, and since they had [once] been a source of trouble to the Yüé-chü [Indoseythians], it was still a fact that if an envoy of the Hsiung-nu, armed with a letter of the Shan-yü, were sent abroad, all the countries *en route* would give him safe-conduct and provisions without daring to make trouble of any kind, whereas the ambassadors of China could not obtain provisions without a money payment, nor could they continue their journeys on horseback without buying the necessary beasts. The reason for this was that the people of these countries thought that, China being far off and wealthy, the Chinese must buy what they wished to get; indeed they were more afraid of the Hsiung-nu than of the Chinese ambassadors. (99) In the neighborhood of Yüan [Ferghana] wine was made from grapes. Rich people stored ten thousand stones and more of it without its spoiling. (100) The people liked to drink wine, and their horses liked lucerne (*mu-su* = *medicago sativa*). The Chinese envoys imported their seeds into China. The Son of Heaven thereupon first planted lucerne and vines on rich tracts of ground, and by the time that he had large numbers of 'heavenly' horses, and when many ambassadors from foreign countries arrived, by the side of Imperial summer palaces and other retreats one might see wide tracts covered with vineyards and lucerne fields.

(101) The people occupying the tracts from Ta-yüan [Ferghana] westward as far as the country of An-si talked different dialects, but their manners and customs being in the main identical, they understood each other. (102) They had deep-set eyes, most of them wore beards, and as shrewd merchants they would haggle about the merest trifles. They placed high value on women, and husbands were guided in their decisions by the advice of their wives. (103) These countries produced no silk and varnish, and they did not know the casting of coins and utensils.³ When some deserters from the retinue of a Chinese embassy had settled there as subjects they taught them

³ According to Sū Kuang, A. D. 352-425, some texts have *t'ie*, 'iron,' for *ts'ien*, 'copper.'

how to cast weapons and utensils other than those that they already had. Having secured Chinese yellow and white metal [i. e. gold and silver],* they used this for making utensils; they did not use it for money. (104) And since Chinese ambassadors became numerous, the young men who had been attached to those missions would generally approach the Son of Heaven with [what seemed] a well worked-out project. (105) Thus they reported: 'The superior horses found in Ta-yüan are concealed [kept out of sight] in the city of Ir-shi, which is unwilling to give them to the Chinese ambassadors.' (106) Now, since the Son of Heaven was fond of the horses of Ta-yüan, he was pleased with this report and sent certain strong men [sportsmen, turfmen?], Ch'ü Ling and others, with a thousand pieces of gold and a golden horse in order to ask the king of Ta-yüan for the superior horses in the city of Ir-shi. (107) The Yüan country being overstocked with Chinese produce, the people held counsel among themselves, saying: 'China is far away from us, and in the Salt Lake [region] numbers of travelers have met with destruction. To the north of it one falls into the hands of Hu [Tartar] robbers; in the south there is dearth of water and vegetation; moreover, they are everywhere cut off from cities without any chance of foraging in many cases. Chinese missions, consisting of merely a few hundred members, have quite commonly lost more than half their staff by starvation. If this be so, how much less could the Chinese send a big army! What harm can they do to us! The horses in Ir-shi are the most precious horses of Yüan.' (108) And they refused to deliver the horses to the Chinese ambassadors. The latter became very angry and with scathing words smashed the golden horse and returned. (109) The notables, in their turn, were incensed and said: 'The Chinese ambassadors have treated us with extreme contempt.' They ordered the envoys out of the country, and caused them to be intercepted at Yü-ch'üng on the eastern

* Wu Jün-kié, of the 12th century A. D., in his critical work *Liang-han-k'an-wa-p'u-i*, chap. 8, p. 8 B, quotes K'ung Ying-ta, one of the authors of the *Sai-shu* and one of the best-known commentators of the classics, 574-648 A. D., as saying that to the ancients *huang-tin*, 'yellow metal,' and *huang-tié*, 'yellow iron,' were identical with the *t'ung*, 'copper,' of his time. He also thinks that *poi-his* means both 'silver' and 'tin,' the latter yielding bronze in combination with copper.

frontier, where the ambassadors were killed and robbed of their belongings.

(110) Upon hearing this the Son of Heaven was very wroth. The ambassadors previously sent to Yüan, namely Yau Ting-han and others, reported: 'The army of Yüan is weak; if we attack it with no more than three thousand Chinese soldiers using crossbows, we shall be sure to vanquish it completely.' The Son of Heaven, having previously sent the Marquis of Tso-yé with seven hundred cavalry to attack Lóu-ian, with the result that the king of that country was captured, approved of the plan suggested by Yau Ting-han and others, and, wishing to bestow a marquisate on his favorite concubine, Madam Li, appointed Li Kuang-li leader of the campaign, with the title *Ir-shi tsiang-kün* [i. e. General *Ir-shi*] and ordered him to set out with six thousand cavalry of the feudal states and several hundred thousand men, being recruits selected from the riffraff of the provinces, and to march upon Yüan with the intent of advancing on the city of *Ir-shi* and taking possession of its superior horses, for which reason he was styled 'General *Ir-shi*.' Chau Shí-ch'öng was appointed *kün-chöng* [adjutant-general!], the late Marquis of Han, Wang K'ui, was sent as a guide to the army, and Li Ch'ö was appointed a governor in charge of the army regulations. This happened in the year 104 b. c. (111) And great swarms of locusts arose to the east of the great wall and traveled west as far as Tun-huang. When the army of General *Ir-shi* had crossed the Salt Lake [Lopnor], the small states on the road were alarmed; they strengthened their city defenses and refused the issue of provisions. Sieges were of no effect. If the cities surrendered, the army would secure provisions; if they did not, it would in the course of a few days retire. When it came to Yü-ch'öng, the Chinese army consisted of not more than a few thousand men, and these were exhausted from lack of food. At the siege of Yü-ch'öng the Chinese troops were utterly routed with great losses in killed and wounded. General *Ir-shi* with Li Ch'ö, Chau Shí-ch'öng, and others reasoned thus: 'If our drive on Yü-ch'öng ended in failure to take the city, how much less can we advance on the king's capital!' Consequently, after a campaign of two years the army was led back. When it reached Tun-huang only one or two out of every ten soldiers were left. (112) The

general sent a message to the Emperor in which he said: 'Owing to the distance of the expedition we often were short of provisions and our soldiers were troubled not so much by battles as by starvation; their numbers were not sufficient to conquer Yüan.' He proposed for the time being to stop the war and to set out again when better prepared. (113) When the Son of Heaven heard this report he was much incensed and ordered the Yü-mön [Gate] to be closed, saying: 'If any members of the army dare to enter, they shall lose their heads.' Ir-shí was afraid and remained at Tun-huang. (114) That summer [103 n. c.] China had lost more than twenty thousand men of Tso-yé's army against the Hiung-nu. The dukes, ministers, and councils called upon to deliberate all wished to give up the expedition against the army of Yüan and to direct special efforts to attacking the Tartars. (115) The Son of Heaven [thought that] having sent a punitive expedition against Yüan, a small country, without bringing it to terms would cause Ta-hia [Bactria] and the like countries to feel contempt for China, and the superior horses of Yüan would never be forthcoming; also Wu-sun and Lam-t'ou would make light of harassing the Chinese ambassadors, [and China] would thus become the laughing-stock of foreign countries. (116) The Emperor therefore preferred an indictment against Töng Kuang and others who had reported that making war on Yüan was particularly inopportune, [and an army consisting of] ticket-of-leave men and sharpshooters, to whom were added the young riffraff and roughriders of the boundary, was organized within rather more than a year. When it left Tun-huang this army consisted of sixty thousand men, not counting those who followed as carriers of secret supplies of extra provisions; a hundred thousand oxen; more than thirty thousand horses; donkeys, mules, and camels numbering myriads, and a commissariat well stocked with provisions, besides arms and crossbows. All parts of the Empire had to bestir themselves in contributing offerings. (117) In this campaign against Yüan no less than fifty military governors were appointed. In the city of the king of Yüan there were no wells, and the people had to obtain water from a river outside the city, whereupon experts in hydraulics were sent to divert the course of the river, thus depriving the city of water, besides effecting an opening through which the city might be laid open to access. (118) In order to pro-

tect Tsiu-ts'üan, an additional contingent of a hundred eighty thousand frontier troops was stationed in the newly established districts of Kü-yen and Hiu-chu in the north of Tsui-ts'üan and Chang-yé. (119) There were further sent the offenders under the seven clauses of the law on minor offenses from the whole empire, as carriers of provisions for the Ir-shi expedition force; wagoners with their carts went in endless lines to Tun-huang; and in anticipation of the defeat of Yüan, two horse-breakers were appointed as equeeries [with the rank of] military governors to handle the superior horses to be selected. (120) Thereupon [General] Ir-shi had to march out again, and since he had now more soldiers, the smaller countries he passed through did not fail to welcome him with provisions for his army. When he came to Lun-t'ou, however, that city would not submit, so, after a siege of a few days, it was laid in ruins. After this event the march to the west proceeded without impediment as far as the [outskirts of the] city of Yüan. (121) On its arrival there the Chinese army consisted of thirty thousand men. An army of Yüan gave battle, the victory being gained by the efficiency of the Chinese archery; and this caused the Yüan army to take refuge in their bulwarks and mount the city walls. (122) General Ir-shi wished to attack Yü-ch'üng, but was afraid his detention thereby would allow Yüan to resort to additional stratagems. He therefore went direct to Yüan, cut off the source of its water-supply by diverting the course of the river upon which it depended, and the city was in great straits. Yüan was invested by the Chinese for more than forty days. On battering the outer city wall they captured one of the notables of Yüan, a prominent leader named Tsien-mi.

The people of Yüan became panic-stricken and withdrew into the inner city, where their notables held counsel among themselves, saying: 'The reason why the Chinese make war on us is that our king, Mu-kua,¹ held back the superior horses and killed the Chinese ambassadors. If we now kill our king, Mu-kua, and surrender the superior horses, the Chinese army will raise the siege; on the other hand, if they do not raise the siege

¹ According to *Ts'ü-ku-han-shu*, chap. 17, p. 14, Ma-ku, which, according to Yen Shih-ku, appears to be similar in sound to the original western name.

there will be war to the death. It is not yet too late.' The notables of Yüan were all of this opinion. They therefore assassinated their king, Mu-kua, and sent his head to General Ir-shi by their notables, saying: 'If the Chinese will cease making war on us, we will let you have all the superior horses you desire and will supply the Chinese army with provisions; but, if you do not accept our terms, we will kill all the superior horses, and help will soon come from K'ang-kü [Soghdiana]. In that case we should keep within the city, while K'ang-kü would keep outside, fighting against the Chinese army, which ought carefully to consider as to the course it will adopt.' In the meantime K'ang-kü kept watch on the Chinese army, and, this being still numerous, did not dare to attack. General Ir-shi consulted with Chau Shih-ch'ong and Li Ch'ö. It was reported that Yüan had recently secured the services of a Chinese [lit. 'a man of Ts'in'] who knew how to bore wells, and that the city was still well supplied with provisions; that the chief malefactor whom they had come to punish, was Mu-kua, whose head had already come to hand; and that, if under the circumstances they did not raise the siege, Ta-yüan would make strenuous efforts to defend the city, while K'ang-kü would lie in wait until the Chinese were worn out, and then come to the rescue of Yüan, which would mean certain defeat to the Chinese army. The officers of the army agreed with these views. (123) Yüan was allowed to make a treaty. They delivered up their superior horses and permitted the Chinese to make a selection from them, besides furnishing great quantities of provisions for the commissariat. The Chinese army took away several dozens [*shu-shi*, 'several times ten'] of superior horses, besides more than three thousand stallions and mares of inferior quality. (124) They also appointed a notable of Yüan, named Mei-ts'ai, who had formerly treated the Chinese ambassadors well, as king of Yüan, with whose swearing-in the campaign ended. After all, the Chinese were unable to enter the inner city, and, abandoning further action, the army was led back.

(125) When General Ir-shi first started to the west from Tun-huang, the countries *en route* were unable to furnish provisions, owing to the size of his army. He therefore divided it now into several sections, which took the southern and northern routes respectively. The military governor, Wang Shön-shöng,

and the former superintendent of the Colonial Office, Hu Ch'ung-kuo, with more than a thousand men, marched by another route to Yü-ch'öng, whose city head refused the issue of provisions to the army. Wang Shön-shöng, though he was two hundred *li* distant from the main body of the army, reconnoitered, but made light of the situation, while upbraiding the people of Yü-ch'öng. The latter persisted in refusing the issue of provisions and, having ascertained by spies that Wang Shön-shöng's army was becoming reduced in numbers day by day, they one morning attacked the latter with three thousand men, killed Wang Shön-shöng and the other leaders, and routed his army, of which only a few men escaped with their lives to rejoin General Ir-shi and the main army. (126) General Ir-shi now entrusted Special Commissioner of Government Grain Shang-kuan Kié with the investment of Yü-ch'öng, whose king fled to K'ang-kü, pursued thither by Shang-kuan Kié. K'ang-kü had received the news of China's victory over Ta-yüan and delivered the fugitive king to Shang-kuan Kié, who sent him well bound and guarded by four horsemen to the commander-in-chief. On their way these men said to one another: 'The king of Yü-ch'öng is China's bitterest enemy. If we now let him live, he will escape, and then we shall have failed in an important undertaking.' Although wishing to kill him, none of the four dared to strike the first blow, when a cavalry officer of Shang-kui, named Chau Ti, the youngest among them, drew his sword and cut off the king's head. He and Shang-kuan Kié with the king's head then rejoined the commander-in-chief.

(127) When General Ir-shi set out for the second time, the Son of Heaven had sent ambassadors to call upon Wu-sun to send big forces for a joint attack on Ta-yüan. Wu-sun sent only two thousand men, cavalry, wavering between two courses of action and being unwilling to proceed. (128) When the smaller countries through which General Ir-shi passed on his return march to the east heard of the defeat of Ta-yüan, they all sent sons and younger brothers [of their kings] to follow the Chinese army in order to be presented to the Son of Heaven and to be offered as hostages to China. (129) In the campaign under General Ir-shi against Ta-yüan the *Kün-chöng* [Adjutant General!] Chau Shih-ch'öng's chief merit had consisted in vigorous fight-

ing; Shang-kuan Kié had distinguished himself by daring to break into the enemy's lines; Li Ch'ō had acted as adviser in strategical schemes; and when the army passed the Yü-mön Gate there were left of it scarcely more than ten thousand men and a thousand horses. In the second campaign the army had not suffered so much from the scarcity of provisions, nor from losses in battle, as from graft practised by leaders and officers, many of whom filled their pockets without any regard for the welfare of the rank and file, numbers of whom had under these conditions lost their lives. (130) In consideration of the fact that the campaign had to be conducted at a distance of ten thousand *li* from home, the Son of Heaven overlooked these offenses and created Li Kuang-li Marquis of Hai-si; further, he gave the title of Marquis of Sin-eh-ti to Chau Ti, the horseman who had beheaded the king of Yü-ch'ōng; the *Kün-chōng* [Adjutant General] Chau Shih-ch'ōng was honored by being created a *kuang-lu-ta-fu* [noble of the first grade]; Shang-kuan Kié was made a *shau-fu* [director in the Imperial Household]; Li Ch'ō was appointed prefect of Shang-tang; three of the officers of the army received ministerial posts; and more than a hundred men received appointments as ministers to the feudal states, or as prefects, or [positions with salaries corresponding to] two thousand stones [of rice]. [Positions yielding incomes corresponding to] one thousand stones, or less, were given to a thousand men each; and all acts of bravery were rewarded by official positions exceeding the expectations of the recipients. Former convicts who had gone with the army received no rewards. Soldiers of the rank and file were presented with gifts of the value of forty thousand *kin* [pieces of gold]. (131) Four years were required to finish the entire campaign against Yüan, from its beginning to the second return of the armies.

(132) Rather more than a year after the conquest of Ta-yüan by China, when Mei-ts'ai was invested as king of Ta-yüan, the notables of that country, attributing the reverses of their country to his method of flattering the ambassadors, conspired against Mei-ts'ai, assassinated him, and installed Ch'an-fōng, a younger brother of Mu-kua, as king of Yüan. (133) They sent his son as a hostage to China, and China returned a conciliatory mission with presents. (134) China subsequently sent more than ten embassies to the foreign countries west of Ta-yüan,

to collect curiosities and at the same time to impress upon such countries the importance of the victory over Ta-yüan and the establishment of a *tu-yü* [military governor!] at Tsin-ts'üan in the Tun-huang region.¹ (135) Westward from here to the Salt Lake [Lopnor] the road at many points was protected by military stations, and in Lun-t'ou there were several hundred soldiers stationed as farmers, the special commissioners in charge of the farms being required to guard the cultivated land and to store the crops of grain for the use of embassies sent abroad.

(136) Concluding remarks of the historian.—It is said in the *Yü-pōn-ki*: 'The Ho [i. e. the Yellow River] rises in the K'un-lun, the ascent of which occupies more than two thousand five hundred *li*. [This hill is so high that] the light of sun and moon may be obscured by its shadow. Its summit contains the spring of sweet wine and the pool of jade.' Now, since by the expedition of Chang K'ien to Ta-hia [Bactria] the source of the Yellow River has been traced, we ask, Where do we see the K'un-lun mentioned in the 'Life of Yü'? Indeed, the account of the nine Provinces of the Emperor Yü, with their hills and water-courses, as described in the *Shu-king*, is much nearer the truth. As regards the wonderful tales contained in the 'Life of Yü' and the *Shan-hai-king*, I do not dare to say anything about them.

TEXT

The Chinese text reproduced on the following pages is that of the K'ien-lung edition of 1739 (see page 93).

¹ The scholar Su Kuang here assumes another name (Yüan-ts'üan) to be the correct reading for Tsin-ts'üan. Yüan-ts'üan, Mr. Leo points out, belonged to the jurisdiction of Tun-huang.

² 'Life of the Emperor Yü,' a work not now otherwise known in Chinese literature, and not mentioned in the Catalogue of the Imperial Library of the Han Dynasty.

史記第一百二十三卷大宛列傳第六十三

¹大宛之跡見自張騫。張騫漢中人建元中為郎。是時天子問匈奴降者皆言匈奴破月氏王以其頭為飲器。月氏遁逃而常怨仇匈奴無與共擊之。漢方欲事滅胡聞此言因欲遣使道必更匈奴中乃募能使者騫以郎應募使月氏與堂邑氏故胡奴甘父俱出隴西經匈奴。匈奴得之傳詣單于。單于留之曰：「月氏在吾北，漢何以得往使吾？」欲使越漢肯聽我乎？留騫十餘歲與妻有子。然騫持漢節不失居匈奴中益寬。騫因與其屬亡鄉月氏西走數十日至大宛。大宛聞漢之饒財，欲通不得。見騫善問曰：「若欲何之？」騫曰：「為漢使月氏而為匈奴所聞道今亡。」唯王使人導送我，誠得至反漢。漢之賂遺王財物不可勝言。大宛以為然。遣騫為發導驛抵康居。康居傳致大月氏。大月氏王已為胡所殺，立其太子為王。既臣大夏而居地肥饒，少寇，志安樂，又自以遠漢，殊無報胡之心。騫從月氏至大夏竟不能得月氏要領。¹²留歲餘還並南山，欲從羌中歸。復為匈奴所得，留歲餘，單于死。左谷蠡王攻

其太子自立國內亂斬與胡妻及堂邑父俱亡歸漢漢拜斬為太中大夫堂邑父為奉使
 君¹⁴斬為人彊力寬大信人愛之¹⁵愛之堂邑父故胡人善射竊急射禽獸給食¹⁶初斬行時百
 餘人去十三歲唯二人得還斬身所至者大宛大月氏大夏康居而傳聞其旁大國五六
 具為天子言之曰大宛在匈奴西南在漢正西去漢可萬里¹⁷其俗土著耕田田稻麥有蒲
 陶酒多善馬馬汗血其先天馬子也有城郭屋室其屬邑大小七十餘城眾可數十萬¹⁸其
 兵弓矛騎射其北則康居西則大月氏西南則大夏東北則烏孫東則扞筭于寘于寘之¹⁹
 西則水皆西流注西海其東水東流注鹽澤鹽澤潛行地下其南則河源出烏多玉石河
 注中國而樓蘭姑師邑有城郭臨鹽澤鹽澤去長安可五千里²⁰匈奴右方居鹽澤以東至
 亂西長城南接羌鬲漢道焉
 烏孫在大宛東北可二千里行國禮畜與匈奴同俗控弦者數萬故戰故服匈奴及盛戰
 其屬不肯往朝會焉²¹

康居在大宛西北可二千里行國與月氏大同俗控弦者八九萬人與大宛鄰國國小南

²⁷ 竊事月氏東竊事匈奴

奄蔡在康居西北可二千里行國與康居大同俗控弦者十餘萬臨大澤無崖蓋乃北海

²⁸ 云

大月氏在大宛西可二三千里居媯水北其南則大夏西則安息北則康居行國也隨畜移徙與匈奴同俗控弦者可一二十萬故時彊輕匈奴及冒頓立攻破月氏至匈奴老上單于殺月氏王以其頭為飲器始月氏居敦煌祁連間及為匈奴所敗乃遠去過宛西擊大夏而臣之遂都媯水北為王庭其餘小衆不能去者保南山羌流小月氏

安息在大月氏西可數千里其俗土著耕田田稻麥蒲陶酒城邑如大宛其屬小大數百

城地方數千里最為大國臨媯水有市民商費用車及船行旁國或數千里以銀為錢錢

如其王面王死輒更錢效王面為畫革旁行以為書記其西則條枝北有奄蔡蔡軒

條枝在安息西數千里臨西海⁴⁰暑濕耕田稻育大鳥卵如甕人衆甚多往往有小君長而安息役屬之以為外國⁴¹國善眩安息長老傳聞條枝有弱水⁴²西王母而未嘗見⁴³大夏在大宛西南二千餘里⁴⁴弱水南⁴⁵其俗土著有城屋與大宛同俗無大王長往往城邑置小長⁴⁶其兵弱畏戰善賈市及大月氏西徙攻敗之皆臣畜大夏⁴⁷大夏民多可百餘萬其都曰藍⁴⁸市城有市販賣諸物其東南有身毒國⁴⁹大夏人曰臣在大夏時見邛竹杖蜀布問曰安得此大夏國人曰吾國人往市之身毒身毒在大夏東南可數千里其俗土著大與大夏同而卑溫暑熱云其人民來象以戰其國臨大水馬以橐度之大夏去漢萬二千里居漢西南今身毒國又居大夏東南數千里有蜀物此其去蜀不遠矣今使大夏從羌中除羌人惡之少北則為匈奴所得從蜀宜徑又無寇天子既聞大宛及大夏安息之屬皆大國多奇物土著順與中國同業而兵弱善漢貿物其北有大月氏康居之屬兵彊可以賂遺設利朝也且誠得而以義屬之則廣地萬里重九譯數殊俗咸德備於四海天子欣然以爲言為

然乃令齋因蜀犍為發間使四道並出出驅出冉出從出印僰皆各行一二千里其北方
 闢氐作南方闢雋昆明昆明之屬無君長善寇盜輒殺畧漢使終莫得通然簡其西可千
 餘里有乘象國名曰滇越而蜀賣森出物者或至焉於是漢以求大夏道始通滇國初漢
 欲通西南夷費多道不通罷之及張騫言可以通大夏乃復事西南夷騫以校尉從大將
 軍擊匈奴知水草處軍得以不乏乃封騫為博望侯是歲元朔六年也四其明年騫為衛尉
 與李將軍俱出右北平擊匈奴匈奴圍李將軍軍失亡多而騫後期當斬賈為庶人是歲
 漢遣驃騎破匈奴西城數萬人至祁連山四其明年渾邪王卒其民降漢而金城河西並
 南山至鹽澤空無匈奴匈奴時有候者到而希矣其後二年漢擊走單于於幕北是後天
 子數問騫大夏之屬騫既失侯因言曰臣居匈奴中聞烏孫王好昆莫昆莫之父匈奴西
 遷小國也匈奴攻殺其父而昆莫生棄於野烏喙肉墮其上狼往乳之單于怪以爲神而
 收長之及壯使將兵數有功單于復以其父之民子昆莫令長守於西域昆莫收養其民

攻旁小邑控弦數萬習攻戰單于死昆莫乃率其衆遠徙中立不肯朝會匈奴65匈奴遣奇兵擊不勝以為神而遠之因蟲屬之不大攻今單于新困於漢而故渾邪地空無人煙是俗貪漢財物今誠以此時而厚幣賂烏孫招以益東居故渾邪之地與漢結昆弟其勢宜勝66聽聽則是斷匈奴右臂也既連烏孫自其西大夏之屬皆可招來而為外臣天子以為然拜騫為中郎將將三百人馬各二匹牛羊以萬數齎金幣帛直數千巨萬多持節副使道可使使遣之他旁國騫既至烏孫烏孫王昆莫見漢使如單于禮騫大慙知蠻夷貪乃曰天子致賜王不拜則還賜昆莫起拜賜其他如故67騫諭使指曰烏孫能東居渾邪地則漢遣翁主為昆莫夫人烏孫國分王老而遠漢未知其大小素服屬匈奴日久矣且又近之其大臣皆畏胡不欲移徙王不能專制騫不得其要領昆莫有十餘子其中子曰大祿彊善將衆將衆別居萬餘騎大祿兄為太子太子有子曰岑娶而太子蚤死臨死謂其父昆莫曰必以岑娶為太子無令他人代之昆莫哀而許之卒以岑娶為太子大祿怨其不得

代太子也乃收其諸昆弟將其衆畔謀攻岑娶及昆莫昆莫老嘗隸大祿殺岑娶予岑娶萬餘騎別居而昆莫有萬餘騎自備國衆分為三而其大總取虜屬昆莫昆莫亦以此不敵專約於烏孫⁷²因分遣副使使大宛康居大月氏大夏安息身毒于真汗罕及諸旁國烏孫發導譯送烏孫與烏孫遣使數十人馬數十匹報謝因令窺漢知其庸大烏孫還到拜為大行列於九卿⁷³歲餘卒烏孫使既見漢人衆富厚歸報其國其國乃益重漢其後歲餘⁷⁴烏孫所遣使通大夏之屬者皆頗與其人俱來於是西北國始通於漢矣然張騫鑿空其後使往者皆稱博望侯以為質於外國外國由此信之自博望侯薨死後匈奴聞漢通烏孫怒欲擊之及漢使烏孫若出具南抵大宛大月氏相屬烏孫乃恐使使獻馬願得尚漢女翁主為昆弟天子問羣臣議計皆曰必先納聘然後乃遣女初天子發書易云神馬當從西北來得烏孫馬好名曰天馬及得大宛汗血馬益壯更名烏孫馬曰西極名大宛馬曰天馬云而漢始幕今居以西初置酒泉郡以通西北國因益發使抵安息奄蔡黎靬條枝

身毒國而天子好兒馬使者相望於道諸侯外國一輩大者數百少者百餘人人所齎持大放博望侯時其後益習而衰少馬漢卒一歲中使多者十餘少者五六輩遠者八九歲近者數歲而反是時漢既滅越而蜀西南夷皆震請更入朝於是置益州越雋牂柯沈黎汶山郡歛地接以前通大夏乃遣使柏始昌呂越人等歲十餘輩出此初郡抵大夏皆後聞昆明為所殺奪幣財終莫能通至大夏焉⁸⁰於是漢發三輔罪人因巴蜀士數萬人遣兩將軍郭昌衛廣等往擊昆明之遮漢使者斬首虜數萬人而去其後遣使昆明復為寇竟莫能得通而⁸¹北道酒泉抵大夏使者既多而外國益厭漢幣不貲其物自博望侯開外國道以尊貴其後從吏卒皆爭上書言外國奇怪利害求使天子為其絕遠非人所樂往聽其言子節募吏民每間所從來為具備人衆遣之以廣其道參邇不能毋侵盜幣物及使失指天子為其習之輒覆景致重罪以激怒全贊復求使使端無窮而輕犯法其吏卒亦輒復跋椎外國所有言大者子節言小者為副故妄言無行之徒皆爭致之其使皆貧人

子私賤官賚物故賤市以私其利外國亦厭漢使人人有言輕重度漢兵遠不能至而禁其食物以苦漢使漢使乏絕積怨至相攻擊而樓蘭姑師小國耳當空道攻破漢使王恢等尤甚而匈奴奇兵時時遮擊使西國者使者爭編言外國災害皆有城邑兵弱易擊於是天子以故遣從驍侯破奴將屬國騎及郡兵數萬至匈河水欲以擊胡胡皆去其明年擊姑師破奴與輕騎七百餘先至虜樓蘭王遂破姑師因舉兵威以困烏孫大宛之屬還封破奴為浞野侯王恢數使為樓蘭所苦言天子天子發兵令恢佐破奴擊破之封恢為浞侯於是酒泉列亭鄣至玉門矣烏孫以千匹馬聘漢女漢遣京宣女江都翁主往妻烏孫烏孫王昆莫以為右夫人匈奴亦遣女妻昆莫昆莫以為左夫人昆莫曰我老乃全其族岑娶妻翁主烏孫多馬其畜人至有四五千匹馬初漢使至安息安息王令將二萬騎迎於東界東界去王都數千里行比至過數十城人民相屬甚多漢使還而後發使隨漢使來觀漢廣人以大鳥卵及黎軒善眩人獻於漢及宛西小國驕潛大益宛東姑師

杼織蘇織之屬皆隨漢使獻見天子天子大悅而漢使窮河源河源出于寘其山多玉石
 采來天子景古國書名河所出山曰崑崙云是時上方數巡狩海上乃悉從外國客大都
 多人則過之散財帛以賚賜厚具以饋給之以覽示漢富厚焉於是大駿抵出奇戲諸怪
 物多聚觀者行賞賜酒池肉林令外國客徧觀各倉庫府藏之積見漢之廣大傾駁之及
 加其駁者之工而駁抵奇戲歲增變甚盛益興自此始西北外國使更來更去宛以西皆
 自以遠尚騎遼晏然未可詘以禮羈縻而使也自烏孫以西至安息以近匈奴匈奴因月
 氏也匈奴使持單于一信則國國傳送食不敢留苦及至漢使非出幣帛不得食不市畜
 不得駒用所以然者遠漢而漢多財物故必市乃得所欲然以畏匈奴於漢使馬宛左右
 以蒲陶為酒富人藏酒至萬餘石久者數十歲不敗俗嗜酒馬嗜苜蓿漢使取其實來於
 是天子始種苜蓿蒲陶肥饒地及天馬多外國使來象則離宮別觀旁盡種蒲陶苜蓿桂
 望自大宛以西至安息國雖頗異言然大同俗相知言其人皆深眼多鬚頰善市賈爭分
 101 102

錄俗貴女子女子所言而丈夫乃決正其地皆無絲漆不知鑄錢器及漢使亡卒降教鑄作他兵器得漢黃白金輒以為器不用為幣而漢使者往既多其少從率多進熟於天子言曰宛有善馬在貳師城區不肯與漢使天子既好宛馬聞之甘心使壯士車令等持千金及金馬以請宛王貳師城善馬宛國饒漢物相與謀曰漢去我遠而鹽水中數敗出其北有胡寇出其南乏水草又且往往而絕邑乏食者多漢使數百人為輦來而常乏食死者過半是安能致大軍乎無奈我何且貳師馬宛寶馬也遂不肯與漢使漢使怒妄言椎金馬而去宛貴人怒曰漢使至輕我遣漢使去令其東邊都成庭攻殺漢使取其財物於是天子大怒諸嘗使宛姚定漢等言宛兵弱誠以漢兵不過三千人彊弩射之即盡虜破宛矣天子已嘗使浞野侯攻樓蘭以七百騎先主虜其王以定漢等言為然而欲候龍姬李氏拜李廣利為貳師將軍發屬國六千騎及郡國急少年數萬人以往伐宛期至貳師城取善馬故號貳師將軍趙始成為軍正故浩侯王恢使導軍而李哆為校尉制軍事是

歲太初元年也而蘭東壁大起蜚西至敦煌貳師將軍軍既西過鹽水當道小國恐各堅城守不肯給食攻之不能下下者得食不下者數日則去比至鄯成士至者不過數千皆饑罷攻郁成郁成大破之所殺傷甚衆貳師將軍與哆始成等計至鄯成尚不能舉況主其王都乎引兵而還往來二歲還至敦煌士不過什一二使使上書言道遠多乏食且士卒不患戰遠饑人少不足以拔克願且罷兵益發而後往112天子聞之大怒而使使還玉門曰軍有敢入者輒斬之貳師恐因留敦煌其夏漢亡沒野之兵二萬餘於匈奴公卿及議者皆願罷擊宛軍專力攻胡天子已業誅宛113小國而不能下刺大夏之屬輕漢而宛善馬絕不來烏孫翕頭易苦漢使矣為外國笑114乃棄言伐宛尤不使者鄧光等數因後材官益發選少年及邊騎歲餘而出敦煌者六萬人負私從者不與牛十萬馬三萬餘匹驢驥橐駝以萬數多齋糧兵弩甚設天下騷動傳相奉伐宛凡五十餘校尉宛王城中無井皆汲城外流水於是乃遣水工徙其城下水空以空其城益發戊申十八萬迺張掖北

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置盾挺休屠以衝酒泉而發天下七科遁及載構哈武師轉車人後相連屬至娘煌而降
 習馬者二人為訖驅校尉備破羌擇取其善馬云於是羌師後後行兵多而所至小國莫
 不迎出食給軍至龜頭龜頭不下攻數日屠之自此而西平行至羌城漢兵到者三萬人
 羌兵迎擊漢兵漢兵射敗之羌走入葆乘其城¹²⁰羌師兵欲行攻都成恐留行而令羌益生
 託乃先至羌決其水源移之則羌固已憂困圍其城攻之四十餘日其外城壞虜羌貴人
 勇將煎靡羌大恐走入中城羌貴人相與謀曰漢所為攻羌以王母寡匿善馬而殺漢使
 今殺王母寡而出善馬漢兵宜解即不解乃力戰而死未晚也羌貴人皆以為然共殺其
 王母寡持其頭遺貴人使竅師約曰漢母攻我我盡出善馬恣所取而給漢軍食即不號
 我盡殺善馬而康居之殺且至至我居內康居居外與漢軍戰漢軍熟計之何從是時康
 居候視漢兵漢兵尚盛不敢進竅師與趙始成李哆等計聞羌城中新得秦人知守井而
 其內食尚多所為來誅首惡者母寡母寡頭已至如此而不許解兵則堅守而康居候漢

罷而宋欽完破漢軍必矣軍吏皆以爲然許完之約完乃出其善馬令漢自擇之而多出食食給漢軍漢軍取其善馬數十匹中馬以下壯馬三千餘匹而立完貴人之故待遇漢使善者名昧蔡以爲完王與盟而罷兵終不得入中城乃罷而引歸初欽師起燉煌西以爲人多道上國不能食乃分爲數軍從南北道校尉王申生故鴻臚壹充固等千餘人別到郁成郁成城守不肯給食其軍王申生去大軍二百里餽而輕之責郁成郁成食不肯出霜¹²³知申生軍日少農用三千人攻戰殺申生等軍破數人脫亡走欽師欽師令搜東都尉上官桀往攻破郁成郁成王亡走康居康居聞漢已破完乃出郁成王于桀桀令四騎士縛守詣大將軍四人相謂曰郁成王漢國所毒今生將去卒失大事欲殺莫敢先擊上即騎士趙弟最少拔劍擊之斬郁成王齋頭弟桀等遂及大將軍初欽師後行天子使使告烏孫大發兵并力擊完烏孫發二千騎往持兩端不肯前欽師將軍之東諸所過小國聞完破皆使其子弟從軍入獻見天子因以爲質焉欽師之伐完也而軍正

趙始成力戰功最多及上官桀改深入李哆為謀計軍入玉門者萬餘人軍馬千餘匹載師後行軍非乏食戰死不能多而特更食多不愛士卒侵奪之以此物故象天子為萬里而伐宛不錄過封廣利為海西侯又封身斬郁成王者騎士趙弟為新時侯軍正趙始成為光祿大夫上官桀為少府李哆為上黨太守軍官吏為九卿者三人諸侯相郡守二千石者百餘人千石以下千餘人奮行者官過其望以適過行者皆給其勞士卒賜直四萬金伐宛再反凡四歲而得罷焉漢已伐宛立昧蔡為宛王而去歲餘宛貴人以為昧蔡善諛使我國遇屠乃相與殺昧蔡立母寡昆弟曰蟬封為宛王而遣其子入質於漢漢因使使賂賜以鎮撫之而漢發使十餘輩至宛西諸外國求奇物因風覽以伐宛之威德而燉煌置酒泉都尉西至鹽水往往有亭而命頭有田卒數百人因置使者護田積粟以給使

外國者

¹³⁵ 太史公曰禹本紀言河出崑崙崑崙其高二千五百餘里日月所相避隱為光明也其上

有醴泉瑤池今自張騫使大夏之後也窮河源惡睹本紀所謂崑崙者乎故言九州山川
尚書近之矣至禹本紀山海經所有怪物余不敢言之也

CHRONOLOGICAL SYNOPSIS

B. C.

176 Mau-tun, Great Khan (Shan-yü) of the Hsiung-nu, defeats the Yüé-chi for the second time (*Shih-ki*, chap. 110, p. 13; cf. Shiratori, p. 115, and Franke, p. 13).

165 (according to Klaproth; but doubtful, according to Shiratori, p. 115). Lau-shang, Mau-tun's successor, annihilates the Yüé-chi, kills their king, and makes a drinking-cup out of his skull. The Yüé-chi flee to the west, and first

164 (†) settle down near Lake Issyk-kul; driving out the Sak-wang (Saka princes†), called also Sak-chung (Saka tribes† the character for *Sak* being modern *Sai*; see Giles, no. 9541¹⁶). The Sak-wang, according to *Ts'ién-han-shu* (chap. 96 A, p. 10 B), migrated south and became rulers in Ki-pin (Kashmir), and the Sak-chung were scattered about and settled in several other states. The scholar Yen Shih-ku (7th cent. A. D.) identified these Sak-chung with the Shak-chung (*Shak* = modern *shí*, the character used in the transcription for *Sakya-muni Buddha*, Giles, no. 9983) of the Buddhists. My present personal view, which however may ultimately prove quite untenable, is that the Sak princes and the Sak tribes driven away by the Yüé-chi near Lake Issyk-kul may have been an eastern branch of that great Saka family of whom Herodotus (7. 64) says: οἱ γὰρ Πέρσαι πάντας τοὺς Σκύθας σακίους Σάκας; in other words, that they were eastern Scyths, the term 'Scyth' being explainable as having originated from an old plural *sak-ut*, 'the Sakas.' However, this may be all wrong. There was at least one Chinese scholar in the sixth century who held quite different views, though my Chinese friend, Mr. T. Y. Leo, does not regard him highly

¹⁶ The Cantonese and, therefore, probable ancient sound of this character is *sak*, and not *sok*, as Franke, p. 47, transcribes it, apparently on the strength of Parker's adoption, in Giles's Dictionary, of Wade's *é* (= ə) in lieu of *ə*, in many of his renderings of Cantonese sounds. The character for our *sai* is correctly described as *sak* on p. 705 of Eitel-Genähr's *Dictionary of the Cantonese Dialect*, as well as in Williams's and all other Cantonese dictionaries.

as an authority; still his theory, of which I distinctly disclaim any indorsement, deserves to be mentioned. Sün Ts'i, whose biography has been preserved in *Pei-shi* (chap. 83, p. 10), offended the religious feelings of Wu-ti of the Liang dynasty (502-549 A. D.) by his criticisms of the Emperor's lavish devotion to Buddhist ceremonial, and fled to the Wei dominions in order to save his head. In his 'Memorial on Buddhism' (*Lun-fo-kian-piao*) he discusses the term 'Sak-chung' of the *Ts'ien-hun-shu*. These Sak tribes, he says, were originally the barbarians of the Yün clan (Giles, no. 13,844), who at the time lived in Tun-huang, were driven out by the Yüé-chi, and on their flight came to the south of the Tsung-ling (see Sü Sung's commentary on the Saka passage in the *Ts'ien-hun-shu*).

In tracing this Yün clan back to its origin, as represented in Chinese literature, we have to refer them to those non-Chinese races who, according to legendary tradition, once lived within the dominions of the model emperors Yau and Shun (about the 23d century B. C.) and were banished to the distant border as being unfit to live with the more civilized Chinese. According to the *Tso-chuan* (9th year of Duke Ch'au = 533 B. C.), the Yiin clan is connected with T'aou-wu, one of the 'Four Wicked Ones' banished by Shun (cf. Hirth, *The Ancient History of China*, p. 85 f.). For 'the ancient kings located T'aou-wu in (one of) the four distant regions to encounter the sprites and other evil things, and so it was that the villains of the surname Yun dwelt in Kwa-chow' (Legge, *The Ch'un Ts'ew, with the Tso-chuen*, p. 625; cf. also *T'ung-tien*, chap. 189, p. 3, and Sü Sung's *Si-yü-shui-tau-ki*, chap. 3, p. 8 B seq.). If this tradition were more than a mere prehistorical legend, we might be led to assume that Sü Sung's commentary considered the Sak tribes expelled by the Yüé-chi near Lake Issyk-kul as belonging to the stock of Tangut or Tibetan nations, rather than to the Scythians of Herodotus.

160 (approximately; see Shiratori, p. 117, and Franke, p. 15). The Wu-sun, formerly under Hsiung-nu rule near Kua-chou, move to the west, drive out the Yüé-chi, and occupy their territory near Lake Issyk-kul, shaking off allegiance to the Hsiung-nu.

145 (?) Ssī-ma Ts'iēn born (Chavannes, 1. xxiv).

140 Wu-ti becomes Emperor of China.

138 Chang K'iēn leaves China on a mission to the Yüé-chī and is made a prisoner by the Hiung-nu.

128 Chang K'iēn escapes, reaches the court of the Yüé-chī via Ta-yüan and K'ang-kü, and spends a year in Ta-hia (Bactria).

127 Chang K'iēn returns and, traveling along the northern slope of the Nan-shan, is again detained by the Hiung-nu near Lake Lopnor.

126 Chang K'iēn again escapes and arrives in China with a report of his discoveries, acquainting the Chinese of the existence of powerful countries in western Asia, including India, and the alleged source of the Yellow River near Khotan.

123 Chang K'iēn created Marquis of Po-wang.

122 Chang K'iēn degraded.

121 The young general Ho K'ü-ping defeats the Hiung-nu (see Chavannes, 1. lxvii).

115 Chang K'iēn's mission to Wu-sun, whence he details sub-ambassadors to various countries including India (?). About a year after his return

114 Chang K'iēn dies.

113 Chang K'iēn's sub-ambassadors return to China with natives of Western Asia.

112 War against Yüé (South China). Attempts made to reach India by a direct route.

111-110 Ssī-ma Ts'iēn's sojourn in the southwest, where he may have become familiar with the K'un-ming and other tribes.

110 Death of Ssī-ma T'an, Ssī-ma Ts'iēn's father.

108 Chau Po-nu defeats the hitherto refractory kingdoms of Lōu-lan and Ku-shī.

106 A line of military stations established west of the Great Wall at Yü-mön. The road to Ta-yüan opened to traffic. The Son of Heaven seeks to procure from Ta-yüan the superior horses kept at the city of Ir-shī (Nish, Uratube). The sale of them is refused, and the Chinese ambassador is killed at Yü-ch'ōng, east of Ta-yüan.

- 104 Li Kuang-li appointed leader of a campaign against Ta-yüan to enforce the sale of the Ir-shi horses.
- 103 Li Kuang-li, returning without having reached Ta-yüan, is forbidden to enter China and ordered to form a new army at the Great Wall.
- 102 Li Kuang-li's second campaign against Ta-yüan.
- 101 Ta-yüan, defeated, becomes a tributary state of China.
- 100 Mei-ts'ai superseded as king of Ta-yüan by Mu-kua's brother, Ch'an-fōng. Since *after* this time the *Shi-ki* speaks of 'more than ten embassies' having been sent to the west (§ 134), it seems as though a number of years at least elapsed before Ssü-ma Ts'ién ceased to work on it.
- 98 Ssü-ma Ts'ién disgraced (see Chavannes, I. xxxvi-xl).
- 87 Death of Wu-ti, whose posthumous title (Wu-ti) is not used by Ssü-ma Ts'ién. The latter must, therefore, have died (or abandoned work?) before that year (Chavannes, I. xliv).

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HUN-SHI (thus transcribed on the strength of a *tsi-lan* scholium in *T'ung-kien-kang-mu*, 4, p. 124; = Chavannes' *hoen-sié*), prince, chief of the western Hiung-nu, tenders his allegiance to China, 61; his territory deserted, 66, 69.

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IR-SHI. The old sound of these two syllables was most probably either

(sh), or *ish*. The modern sound of the character for the first syllable, now pronounced *ir*, is *ir* in five of its combinations with certain radicals according to Chalmers, *K'ang-Hi*, p. 28 f., the best authority as regards the correct description of sounds by the Chinese method, and, since the omission of radicals in ancient texts is by no means unknown (see the examples, to which I may add others referred to by me in *JAOS* 39, 27), I do not hesitate to look upon *ish* as a possible equivalent in its ancient sound for modern *ir-shi*. I am, therefore, inclined to fall in with de Lacouperie's proposition (*Western Origin of the Early Chinese Civilization*, pp. 220 and 224; cf. also K. Shiratori, quoted in Dr. T. Fujita's paper 'The Castle Kwei-shan in Ta-yuan kuo and the Royal Court of Yüeh-shih' in the *Journal of the Japanese Oriental Society*, 6, 194 f.) to connect this name *Nish* with the home of the celebrated Nisean horses of classical lore. Though located by Herodotus on 'a large plain in Media territory,' later classical authors (see Heinrich Stein in a footnote to the Nisean horse passage in his edition of *Herodotus*, 7, 49) name different localities much further east. Pliny (6, 113) speaks of 'regio Niseum Parthorum,' and Stein continues in his footnote: 'Noch östlicher haftete der Name an den Hochthälern des Murghab (Margos), dem in Venid. 1, 26 erwähnten "Nighya welches zwischen Mōuru (Merv) und Bākēf (Baikh) liegt"; während nach einer unsicheren Notiz bei Herod. V. Nēgān irsos und Nēid. irsos ῥειαὶ τῶν οἵδης in der zwischen Sogdiana und Baktriana gelegenen Landschaft Karasorjōra (τριαὶ Ελλάδα γλάρη ῥεοῖ) heimisch waren. Ritter, Erdk. 9, 364, findet sie in der turkomanischen Zucht der Atak, die noch heute durch ganz Persien wegen ihrer Größe, Ausdauer und Schnelligkeit selbst vor der arabischen Rasse ausgezeichnet ist, und deren edle Zucht wohl zum Teil in einigen Statthaltern der Perser-Monarchen in den medischen Höhebenen eingeführt werden konnte.' Could not this be the *Ir-shi* of the *Shi-ki*? It looks almost as if the multiplicity of regions which, like the cities claiming the privilege of being the birthplace of Homer, are named as producers of the best horses the world could boast of at the time, can be easily explained, if we allow some Persian, Parthian, or Soghdian proper name like *Nish*, Hellenized into *Nēgān*, etc., had in the course of centuries grown into a technical term, designating at different periods the chief claimant for horse-breeding *par excellence*. Modern dictionaries furnish what may be almost looked upon as an analogy to this process in the term 'Tattersall's,' once the famous horse-market in London, which has since become a designation of large horse-markets in all countries. It seems that by following up Ritter's proposition we may be allowed to locate the 'Tattersall's' of the *Shi-ki* pretty near the city of Tu-fün, possibly on Tu-fün territory itself. We may thus arrive at a compromise between de Lacouperie's view, rejected by Chavannes, and that of Chavannes, who refers us (p. xiv, note) to the Chinese identification, made in the 7th century A. D., when tradition may still have been alive, of the city of *Ir-shi* with the *Osrushna* of Buddhist travelers, i. e. the present city of Uratube, about a hundred miles east of Samarkand.

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MAU-TUN, Great Khan of the Hsiung-nu, 29.

MEDICAGO SATIVA, *see* MU-SU.

MEI-TS'AI (possibly some such name as *Moor*, or *Mong*, which appears on Saka coins in India, cf. A. Cunningham, 'Coins of the Sakas' in *Numismatic Chronicle*, vol. 10, 3d ser., p. 103 ff., of whom the man called Mei-ts'ai may be a namesake, though certainly not the identical king, whose coins were found chiefly in the neighborhood of Taxila), king of Ta-yüan, succeeding Mu-kun, 124; killed by his people for being too friendly to China, 122.

METALS, melting of, taught by Chinese deserters in countries between Ta-yüan and An-si, 103. (Cf. an essay on the technicalities of this passage in *Liang-han-k'an-wu-p'u-i*, chap. 8, pp. 8 and 9.)

MIGRATIONS of the Wu-ku from original seats among Hsiung-nu east of Lopnor to distant west, 62-65; *see also* YÜE-CHU.

MILITARY GOVERNORS, special (*tsiou-yü*), appointed for the army against Ta-yüan, 117; appointed as horse-breakers to conduct horses from Ta-yüan, 119; (*tsu-yü*) appointed after the war to reside in Ts'in-ts'ien, 134.

MINISTERS, of State, high rank in civil service, 74; appointed for army service, 120.

MU-KUA (or Ma-ku), King of Ta-yüan, responsible for trouble with China, sacrificed by his people and succeeded by Mei-ts'ai, who was friendly to the Chinese, 122; his younger brother made king by his people, 132.

MUMMERS, 95.

MU-SU, the Emperor Wu-ti covers large tracts of land with *mu-su* as fodder for his horses, 100. (Canton dial. *mu-ku*; i. e. the lucerne, *medicago sativa*, probably the transcription of some foreign word, like Turkish *burchak*; if we allow for a change the word may have undergone from the original meaning within the last two thousand years. For *burchak*, of which the old Chinese sound *mu-ku* would be quite possible as a transcription, now denotes another seed plant used for fodder, the vetch, according to Radloff, *Wörterbuch der Türk-Dialekte*, 4, col. 1882: *Kara burchak*, 'die Wicke (vicia).')

NAN-SHAN, a range of hills separating Tibet from Eastern Turkestan, and its continuation towards the east, 12, 29, 61.

NISH, *see* IS-ANI.

NOMAD NATIONS: Wu-sun, 25; K'ang-ku, 27; An-shi, 28; Yüe-chü, 29. Cf. CITY DWELLERS.

'NORTHERN SEA,' term applied to the Great Marsh (*Palus Moxotis*), 28.

NOTABLES (*Kui-jui*), the real power in Ta-yüan, 109 *et passim*.

ORACLE consulted, *see* 'BOOK OF CHANGERS.'

ORDU, Western, of the Hsiung-nu, the Wu-sun leader (K'un-mo) made governor of, 64; conquered by the Chinese, 60; *see also* Ho K'ü-pien.

OSTRICH, the, in T'ien-shi, 42; eggs of the, brought to China by Parthians, 92.

OXUS RIVER, *see* K'UH-SHEH.

PA, part of modern Sui-ch'uan, 62.

PAI SHI-CH'ANG, unsuccessful leader of caravans to Bactria, 61.

PARCHMENT, writing material in Parthia, 37.

PARTHIA, *see* AX-SI.

PIAU-KI, general, *see* Ho K'ü-pien.

P'O (= Yu-chia in Sui-ch'uan), a starting point on the road to India, 55.

PO-NU, *see* CHAU PO-SU.

POPULAR CUSTOMS, between Ta-yüan and An-si, 101, 102; like those of the Hsiung-nu, *see* Wu-SUN; Yüe-chü; like those of the Yüe-chü, *see* K'ANG-KU; An-shi; like those of Tschia, *see* SUON-TU.

POPULATION, in Ta-yüan, 20; in T'ien-chü, 43; in Ta-hsi, 50.

POSTAL ROADS in Ta-yüan to K'ang-ku, 9.

PO-WANG, Marquis of, title bestowed on Chang K'ien in 123 n. c., 58; name commands respect in western countries, 77; trade conformed to precedent created by, 79; successors to, as ambassadors to the West men without distinction, 85.

PREFECTS, posts of, given as rewards to army officers, 130.

PROVISIONS given to Hsiung-nu, but refused to Chinese envoys to the West, 98; difficulties in procuring, from cities en route by Chinese army, 111; drawn from all parts of the empire for second army against Ta-yüan, 116; carriers of, selected from offenders against the law, 119; readily granted en route, 120; Ta-yüan grants, to the Chinese army, 123; difficulty of procuring, causes Chinese army to proceed in sections by different routes, 125; city of Yu-ch'ing refuses issue of, 125; shortness of, due to graft, 129; station for the supply of, for embassies to the West established at Lam-t'ou, 135.

P'U-T'AU = *shirpu-t*. See Kingmill in *JRAS*, new ser. 14. 85 n. See also VINT and WINE. The Chinese term *p'u-t'au* for 'grape' occurs for the first time in Chinese literature in our text.

REWARDS to army officers, 130.

RICE, grown in Ta-yüan, 19; in An-si, 31; in T'ien-chü, 41; *see also* STONES OF RICE.

RIVERS flowing east and west in Central Asia, 23.

BOBBERS, few, in Ta-hsi, 16; obstruct road in Salt Lake region, 107; *see also* K'UH-MING TRIBES.

SALT LAKE (Lopnor), believed to receive the headwaters of the Yellow River, which is said to flow underground to the south of it, 23; Western Hung-nu east of, 24; country east of, became clear of Hung-nu in 121 a. c., 61; proposal to invite Wu-sun to fill vacant territory, 66; Chinese victories near, 87; region near, dangerous to travelers, 107; Chinese army against Ta-yüan crosses, 111; road to the West as far as, lined with military stations, 125.

SAN-FU, the metropolitan district, 82.

SEA, WESTERN = Caspian or Aral, 23; = Persian Gulf, Red Sea, or Mediterranean, 39; NORTHERN, term applied to the *Palis Marofis*, 28. (Regarding the terminology of such names as *si-hai* and *pi-hai*, cf. Liang-hao-k'ang-wei-p'u-i, chap. 8, p. 7.)

SHA-CHI5U, original home of Yüeh-chi nation, 29.

SHANG-KUAN KIE invests city of Yüeh-t'ung and captures its fugitive king in K'ang-kü, 126; as a leader distinguished by breaking into the enemy's lines, 129; receives a court title, 130.

SHANG-KUI, a prefectoral city in the present Kan-su province, birthplace (or, garrison?) of Chau Ti, 126.

SHANG-TANO, a prefecture, 130.

SHAN-HAI-KING (the 'Hill and Sea Classic'), Ssu-ma Ts'ien refrains from saying anything about its (probably much too wonderful) tales, 136.

SHAN-YÜ (cf. the legend Sonab on coins of Saka kings referred to the Chinese term by Cunningham in *Num. Chron.* 3d ser. 8 and 12; the term is explained as corresponding to Turkish *tängri budu*, or the Chinese *Tien-tzi*, i. e. 'Son of Heaven,' Schott in *Sb. der Ak. der Wiss.* Berlin, 1. Dec. 1887, p. 7 of reprint), title of the Great Khan, or King, of the Hung-nu, 3, 29, 63, 84, 66 et passim; death of, 12; envoys armed with letters from, respected more than those from China in countries west of Wu-sun, 98.

SHAU-FU, a court title, 130.

SHEN-LI, a district near modern Ya-chou-fu in Ssu-ch'uan, 80.

SHEN-TU (= Sindh, India) southeast of Ta-hia, 52; unrecorded early trade of, with Ssu-ch'uan, 53; popular customs of, like those of Ta-hia, 53; Chang K'ien's plan to discover, 53; fruitless attempts to open direct communication with, 55-58; assistant envoys sent to, by Chang K'ien from Wu-sun, 72; missions to (via Bactria?), 79.

SHU (Ssu-ch'uan), bamboo and cloth from, 53; easiest thoroughfare to India, 53, 55; traders of, surreptitiously export produce to Tien-yüe on the road to India, 57; territories in the southwest of, added to Chinese dominion, to serve as thoroughfares to Far West, 80, 82.

SHU-KING, legendary accounts regarding the source of the Yellow River referred to in, seem to be confirmed by Chang K'ien's discovery, 136.

SLAU-YUE-CHI, 29.

SILK, sent to Wu-sun, 67; none in Ta-yüan and countries west of it, 103.

SILVER, see METALS.

SIN-CH'I. Marquis of, see CHAU TI.

SINDH = India, see SHEN-TU.

SI-WANG-MU (lit. 'Western King's Mother,' a legendary being in the extreme west), 45.

SOGHDIANA, *see* K'ANG-KU.

SOLDIERS, *see* ARMY.

SON OF HEAVEN, *see* WU-TI.

SSI, a station on the supposed road to India, 55.

SSI-CH'UAN, *see* SHU.

STONES OF RICE, an annual income in kind, as a reward to army officers, 130.

SU-HIE, small country east of Ta-yüan, 92.

SUI TRIBES, 56.

SU KUANG, scholar, 82 n.

'SWEATING BLOOD,' said of horses, *see* HAN-nU.

SYRIA, *see* LI-KAN.

TA-HIA (Bactria), occupied by the Yüé-chi (Indoscythians), 10, 11, 29; visited by Chang K'ien in person, 17; in the southwest of Ta-yüan, 22; south of Yüé-chi, 29; described, 46-53; people bad warriors, but good traders, 49; great, rich, and civilised like China, 54; Wu-ti consults Chang K'ien about, 61; assistant envoys sent to, by Chang K'ien from Wu-sun, 72; attempts to reach by the southern route (Yün-nan, Se-ch'uan, etc.) interfered with by K'un-ming tribes, 81; northern route via Tsin-ts'üan, 84.

TA-HING, 'Chief of Foreign Office,' title bestowed on Chang K'ien, 74.

TA-I, small country in the west of Ta-yüan, 92.

T'AI-CHUNG-TA-FU, title bestowed on Chang K'ien, 13.

TA-LU, a son of the King of Wu-sun, 71.

T'ANG-I, family owning a Tartar (Huang-nu) slave, 4.

T'ANG-I FU, so called because he must be held to have been adopted by the T'ang-i family, *see* KAN FU.

TANGUTANS, *see* K'ANG.

TARTARS (*hsu*), generally designating the Hsiung-nu (Huns) with the several nomadic Turkish, Mongolic, and Tungusic tribes forming their empire, 4, 10, 86, 107.

TA-TSU, 'the Great Marsh' = *Palus Maeotis*, or Sea of Azov, near the country of the Alana, *see* AN-TS'AI.

TA-YUAN, i. e. Great Yuan, in opposition to Sian-yüan, i. e. Little Yuan, a small country east of it and probably named after it. I am now inclined to look upon Yüan as the real name of the country, its being an epithet placed before it as in the case of Ta-ts'ien and Ta-yüeh-chi. For, although our chapter is entitled 'Ta-yüan' and the country is so styled especially in Chang K'ien's own report to the emperor, Yuan without the prefix is, in our text, often used for it, not merely in combinations as in yüan-mu, 'horses of Yuan,' or yüan-han-jün, 'the notables of Yuan,' but also in phrases where it could not well be interpreted as a mere abbreviation, e. g. po yüan, 'to defeat Yuan.' From paragraphs 101 to 103 it would appear that the population of Ta-yüan had many characteristics in common with the nations adjoining it in the west as far as An-si (Parthia). This seems to justify us in looking

upon Ta-yuan as a northeastern portion of the former Bactrian empire which, for some reason or other, may have escaped conquest by the Yüeh-chi. The people grow rice, the cultivation of which must have come to them from India by way of Bactria (Hehn, *Kulturstufen und Haustiere*, 8th ed., 1911, p. 504 ff.), and store wine from the grape, in which respect they may have adopted the practice of Greek settlers in Bactria. It seems quite possible that the name by which such a semi-Greek population became known to the surrounding Tartar tribes, especially the Hsiung-nu or the Wu-sun, from whom Chang K'ien may have obtained his first notice of the country, was Yavan, of which Yuan is a fair linguistic equivalent. For, 'the Yavanas are the Greeks of the Asiatic dominions and especially the Bactrians, situated just beyond the borders of India.' Cf. C. C. Torrey, 'Yavan and Hellas,' *JAOS* 25, 304; Dr. Edkins, in his paper 'What did the ancient Chinese know of the Greeks and Romans?' *J. China Branch, R. A. S.*, vol. 18, 1883, p. 5; E. Bourouef, *JA* 10, 238 f.; T. de Lacouperie, *Western Origin of Early Chinese Civilization*, p. 221.

TA-YUAN (Ferghana), first known through Chang K'ien, 1; reached by Chang K'ien, 7; connected by postal roads with K'ang-kü (Soghdiana), 9; visited by Chang K'ien in person, 17; Chang K'ien's account of, 18-22; great, rich and civilized like China, 54; assistant envoy sent to, by Chang K'ien from Wu-sun, 72; horses from, stronger than those from Wu-sun, 79; restrained by reputation of Chinese victories near Lake Lopnor, 87; small countries east and west of, 92; best horses of, kept at the city of Ir-shi, 105; not afraid of an attack by the Chinese, 107; refuses to deliver the horses of Ir-shi, 108; first army sent against, fails, 110-113; second campaign decided upon, 114-116; its organization, 117-119; city of the king of, has no wells, 117; Chinese army reaches, 120; battle won by Chinese archers; Ta-yuan army takes refuge in city, 121; water supply cut off and city invested, negotiations for peace resulting in the delivery of horses and the establishment of Chinese supremacy, 122-124; campaign against, occupies four years, 131; kings of, see MU-KUA; MEI-TS'AI; CH'AN-FUNG.

TA-YUAN AND AN-SI, countries between: language, 101; appearance and character of the people, 102; position of women, 102; have no silk or varnish, 103; taught melting and casting of metals by Chinese, 103.

TA-YÜE-CHI, see YÜE-CHI.

TI tribes, prevent expedition to Indis, 56.

T'IAU-CHI (Chalden), in the west of Parthia, 38, 39; described, 40-45; governed by petty chiefs, considered a foreign country by Parthia, 42; legends of Jo-shni and Si-wang-mu, 45; regular missions to, 79.

T'IEH-MA, 'heavenly horse' (the wild horse), 19, 79. (Regarding the legendary origin of the 'heavenly horse,' see SUI-KI, Chavannes, 3, 236 f.)

TIEN-YUE, country on the supposed road to India, 57.

TONG KUANG reprobred for advising discontinuance of war against Ta-yuan, 118.

TRADE, in An-si, 35; in Ta-hsi, 49, 51; from China to Bactria via India,

53; smugglers from Shu (Sze-ch'nan) send goods to T'ieh-yüé on the road to India, 57; between China and western countries dairies from Chang K'ien's mission, 77; by caravans to and from Western Asia stimulated by demand for good horses, 79; see also CARAVANS; EXPEDITIONS; TRIBUTE.

TRANSCRIPTIONS (of foreign sounds): (Ta-) Yüan = Yuan; Luk-di = derivative of ulak, great (1), 12; p'ot'au = *börge-t*, 19; An-ts'ui = Aorsi, 28; An-si = Arsak, 30; Shoo-tu = Sudh, 32; muk-ank = bur-chak (1), 100; Irshi = Nish, *Nysa* (1), 105. (Note that final *r* may be represented by final *t* or final *n* in old Chinese not later than the 13th century, cf. Hirth, 'Chinese Equivalents of the letter R in Foreign Names,' in *Journ. China Branch, R. A. S.*, vol. 21, 1886, p. 214 ff., or by final *k*, cf. T. de Lacouperie, 'The Djurtschen of Manchuria,' *JAS* 21, 436.)

TRIBUTE brought by Parthia and small countries on the way to China, 92. TSANG-KO, a district comprising parts of modern Sze-ch'nan, Hu-nan, Kui-chou and Kuang-si, 80.

TS'IEH, a small country in the west of Ta-yüan, 92.

TSIEN-MI, a notable of Ta-yüan, captured at the siege of the city, 122.

TS'IN, a man of, i. e. a Chinese, 122.

TSIU-TS'UAN, district near the Great Wall, established to facilitate trade with Far West, 79; military stations near, 89, 125; army to protect boundary in, 118; resident military governor appointed for, 124.

TS'ON-TS'U, title of the son of the crown prince of Wu-sun, 71; given Chinese princess in marriage by his grandfather, the K'un-mo king, 90.

TSO-YE, MARQUIS OF, see CHAU PO-SU.

TSUNG-P'IAU, see CHAU PO-SU.

TUN-HUANG, near old seats of Yüeh-chi, 29; locusts near, 111; Chinese army returns to, 111, 113; second army leaves, 116, 119, 125.

TU-YE, title of a resident military governor, 134.

VARNISH, 103.

VINE, seeds of the, (seedlings?) imported from Ta-yüan and planted near the Imperial summer palaces, 100; see also WINE.

WAGONS and carts with army against Ta-yüan, 119.

WALL, see GREAT WALL.

WANG K'HI, leader of caravans to the west, 85; created Marquis of Huan, 88; attached to the army against Ta-yüan, 116.

WANG SHON-SHANG, military governor, defeated and killed on an expedition to Yüeh-ching, 124.

WEI KUANO, general sent against the K'un-ming tribes in 109 n. c., 82.

WESTERN SEA (si-hai), see SEA, WESTERN.

WHEAT (barley?), grown in Ta-yüan, 19; in An-si, 31.

WINE, grape, in Ta-yüan, 19, 99, 100; in An-si, 31; see also VINE.

WOLF, a She-, becomes legendary wet-nurse of king of Wu-sun exposed in wilderness, 62. (Note that a she-wolf is mythologically connected with the origin of many Turkish tribes, which may also account for 'the symbolic use by them of a wolf's head at particular functions,' cf.

E. H. Parker, *A Thousand Years of the Tartars*, p. 178; Kingsmill, *JEAS* 14, 85 n.

WOMEN influence husbands in countries between Ta-yüan and An-si, 102. WON-SHAN, a district corresponding to modern Mén-ch'ou in Ssu-ch'uan, 80.

WRESTLERS, 95.

WRITING, in Parthia, 37.

WU-SUN (a nation in the neighborhood of Lake Issyk-kul, on the southern slope of the T'ien-shan, according to Sū Sung, *Si-ye-shui-tau-kr*, chap. 4, p. 11, whether they had migrated from Kua-chün, their former homes at the time of the Contending States during the fifth and fourth centuries B. C., according to the scholar in *Shi-ki*, 110, p. 12; cf. *Tz'u-ien-han-shu*, chap. 96 B, p. 1 B, and other passages; cf. also Shiratori, p. 103 ff.; probably of Turkish stock like the Hsiung-nu; cf. note under Wou, Shiratori, *op. cit.*, and Franke, pp. 17-21), in the northeast of Ta-yüan, 22; a nomad nation like the Hsiung-nu, 25; formerly subject to Hsiung-nu, 26; legendary origin of their King K'un-mo, 62; retreat from their original territory among the western Hsiung-nu to the more distant west, 64; maintain their independence, 65; Chang K'ien proposes their filling vacant territory near western boundary of China and bribing them by presents and the marriage of their king with a Chinese princess to become friends of China, 66; Chang K'ien's expedition to, 67-74; court ceremonial of, corrected by Chang K'ien, 68; declines to move to the east, 69, 70, 71; guides, interpreters, and other natives accompany Chang K'ien back to China, 73; and return to their homes full of the impressions they have received of China's greatness, 76; missions to China interfered with by Hsiung-nu, so that Wu-sun asks for a Chinese princess in marriage, 78; horses from, compared with those from Ta-yüan, 79; restrained by reports of Chinese victories near Lake Lopnor, 87; a Chinese princess sent for marriage to, 90; rich in horses, 91; China's prestige with, depends on success in far-western warfare, 115; not very quick in complying with Wu-ti's wish to attack Ta-yüan, 127.

WU-TI, the emperor (generally referred to as the Son of Heaven, Wu-ti being his posthumous designation), informed of their flight to the west, anxious to find the Yü-chi as allies against the Hsiung-nu, 3, 4; falls in with Chang K'ien's plan of extending Chinese sphere of influence to Western Asia, 54; approves of Chang K'ien's scheme of befriending the Wu-sun nation, 67; consults 'Book of Changes' about horses; his craze for western horses develops caravan trade, 79; highly pleased by results of mission to Parthia, 92; likes company of foreigners, 95; feasts given to them lay the foundation for the popular taste among the Chinese for the performances of jugglers, wrestlers, mimurers, etc., 95; creates vineyards and lucerne fields, 100; his fondness for the horses of Nish (ir-shi) becomes the source of a campaign against Ta-yüan, 106-110; angry at Li Kuang-ni's failure to punish Ta-yüan, 113; his ambition about China's reputation in western Asia, 115; tries to engage Wu-sun

to fight Ta-yüan, 127; foreign princes anxious to be presented to, 128; bestows rewards on generals, 130.

YAU TING-HAN, former ambassador to Ta-yüan, proposes war, 110.

YELLOW RIVER, *see* Ho River.

YU-CH'UNG, city on the eastern frontier of Ta-yüan, Chinese envoys intercepted and killed at, 109; first Chinese army against Ta-yüan routed at the siege of, 111; Li Kuang-li avoids, 122; reconnoitering body of Chinese troops defeated by, 125; invested by the Chinese, 126; its king pursued to K'ang-kü, delivered, and killed, 126.

YUE (= Nan-yü), 5, 57; wars against, in 112 n. c. referred to (1), 40.

YUE-CHI (Indo-scythians; for an exhaustive digest removing many prejudices entertained by European scholars, cf. Franke, p. 21 ff.), their disappearance from the neighborhood of China reported to the Emperor Wu-ti by Hiung-nu (Hun) prisoners, 3; desired by the Chinese as allies against the Hiung-nu, 3, 4; Chang K'ien conducted to, 9; defeated by the Hiung-nu, conquer Ta-hia (Bactria), 10, 29, 40; visited by Chang K'ien in person, 17; in the west of Ta-yüan, 22; politically influences K'ang-kü, 27; described, 29; popular customs of, like those of Hiung-nu (of An-si according to *Ts'ien-han-shu*), 29; old seats and migration to the west, 29; capital and court north of the Oxus (somewhere about Bokhara), 29; strong in military, 54; assistant ambassadors sent to, 72; ambassadors to, passed south of Wu-sun, 78; population on the road to, beyond Wu-sun help Hiung-nu rather than Chinese envoys by supplying provisions, 98.

YUE-SUI, a district on the boundary of Yün-nan and Ssü-ch'uan, 80.

YU-MON GATE, in the Great Wall, line of military stations near, 89; closed up, 113; Chinese second army returns to, 129.

YU-PUN-KI, 'Life of the Emperor Yü,' Ssu-ma Ts'ien's view of its wonderful tales, 136. (This is not one of the chapters styled *pin-li* and devoted to the lives of emperors by Ssu-ma Ts'ien himself, but a work not preserved in our days, cf. Chavannes, I. cixxi f.)

YU-TIEN (Khotan), east (sic) of Ta-yüan, 22; the watershed of rivers in Central Asia, 23; produces jadestone, 23; assistant envoys sent to, by Chang K'ien from Wu-sun, 72; quarries near, yield jadestones brought to China, 23; Yellow River supposed to rise near, 93.

ARABS AND TURKS

J. F. SCHELTEMA

NEW HAVEN, CONNECTICUT

The unpleasantness between the Arabs and Turks, now thrust upon the attention of the world by one of its latest developments, the rebellion of the Grand Sharif of Mecca against his suzerain at Constantinople, is not at all of such recent growth as some appear to think. Ever since the Abbasid Khalifs of Baghdad became puppets in the hands of their Turkish praetorians, and the effective assistance which Erto-gral and his four hundred of the Ottoman clan gave to the Seljuq Prince 'Ali ad-Din established their military ascendancy, no love has been lost between those usurpers of power in Islam and the children of the land of its birth, its Holy Land. From the moment Turkey began to dominate or rather to try dominating Arabia, Arabian revolts against Turkish rule were therefore a matter of course, and all along hardly a year elapsed without one or more being in progress here or there between the Red Sea and the Persian Gulf, the Syrian Desert and the Indian Ocean. Far from imitating the Romans, who had overrun Asia Minor and adjacent territories from the West, always studious to obliterate racial differences, the new conquerors from the East, disdaining even the prudent policy of the earlier warrior statesmen of their own creed, did not care for the amalgamation of their subject races; in fact there was no homogeneity among themselves. The Turks despised the Arabs for their excitable temperament and the Arabs found food for ridicule in Turkish indolence, in the sluggish workings of the Turkish mind. Between Arab and Turk, physically and mentally in marked contrast, no attraction or accord was possible. Hence the sons of the shadowless desert under a cloudless sky, refractory already in their allegiance to the chiefs appointed by their common consent, proved superlatively troublesome to their intrusive Khalifs of the house of Othman.

Excepting those who had private reasons to put up with it, the Arabs did not acknowledge the Ottoman Khalifate as an institution decreed by God. For them the claims to suzerainty

of the Ottoman Sultan did not rest on any spiritual right which might be conceded to one of the Quraish, the elect among their own tribes, but on the right of might, provided that it could compel obedience. We do not intend to discuss here the significance of the Khalifate in general or the legitimacy of the Ottoman Khalifate in particular: suffice it to say that whatever authority it wished to exercise in the Arabian Peninsula had to be supported by main force. And so the Ottoman Sultan's mailed fist constituted his title to control over the Hijáz with the rest, pre-eminently over Mecca, the honored, and Medina, the lustrous, from the guardianship of which *de facto*, if not *de jure*, conversely his title to the Khalifate was partly derived,¹ notwithstanding the circumstance that at various times in the history of Islam its Holy Places and the Khalifate managed to do very well without each other. The mailed fist of the Osmanly 'Servants of the Sacred Cities,' like that of the Umayyads, Abbasids, Fatimids, or whatever other name the absent *soi-disant* rulers of Arabia went by, wielded no sword of the Dzū'l-Faqār type, invincible, coercing and constraining every one. The descendants of 'Ali, son-in-law to the Prophet and that famous blade's famous owner, were among those who most strenuously objected to and resisted interference from outsiders in their country's affairs, which they preferred to run at their own sweet will, a feature of the situation which gave higher zest to the Arabs' intertribal animosity and resulted in the birth of several quasi-independent, everlastingly quarreling principalities.

In the Hijáz the principality of Mecca, risen from such beginnings, made no exception to the rule of endless warfare prompted by vendetta and the exigencies of retaliation, which pleasantly occupied the first families of the land striving to extend their influence with the extension of their ancestral estates. Between

¹ The five titles on which the Ottoman Sultan's right to the Khalifate rests with sufficient strength, according to the learned expounders of the law who support his claims, to overrule the requirement implied in the seventh condition of capacity, namely that of lineage, are (1) the title conferred by the sword; (2) the title conferred by election; (3) the title conferred by homage or the promise of allegiance; (4) the guardianship of the Holy Places; (5) the possession of the sacred reliquies, among which are especially venerated one of the Prophet's teeth, a few hairs of his beard, his mantle, and his standard, the 'majestic cypress of the garden of victory.'

raids on tribes and clans beyond the pale of close relationship, the members of the same family fought one another for a lion's share in the division of their plunder, especially when the death of their leader caused disagreements over his succession engendering armed conflicts among his kith and kin in the course of its constant redistribution. *Abū Muḥammad Ja'far* of the Mūsāwi, a branch of the Ḥasanids, seized Mecca at a date between 951 and 968. As the first Grand Sharif, i. e., chief of the sharifs in the proper sense of the word, he restored comparative order in the chaos born of the destructive inroad of the sectarians who, following the doctrine of Ḥamdān Qarmat, had violated the sanctuary and carried off to their capital the Ka'bah's hallowed black stone, which they kept for ten years. The Grand Sharifate did not inaugurate unbroken tranquillity for a country the unending feuds of whose inhabitants meant incessant turbulence with the passing of authority from one hand to the other until the Hashimites contrived to make themselves felt in the greater part of the Hijāz and kept it in some degree subservient to their will during the latter half of the twelfth century. Yet, their lordship, even over Mecca, neither acquiesced in nor disputed by the Abbasid Khalifs, did not remain uncontested by the robber-knights swarming round, least of all by the bellicose princeelings who ruled in Medina. Consequently their Meccan domain, increasing or decreasing as luck of war decided, waxed and waned like the moon going through its phases. More often than not Taif belonged to it on the East and Jeddah on the West side, the possession of the harbor adding to the townspeople's facilities for fleecing the pilgrims, 'Allah's guests,' whose entertainment was, and still is, the vocation of 'Allah's neighbors.'²

At the opening of the thirteenth century an enterprising chieftain, named Qatāda, made an end to the Hashimite dynasty. Also left practically alone by their overlords, he and his successors of his family had no less hard a struggle with enemies of their own kindred to retain their grip on the Grand Sharifate of Mecca. Nevertheless they succeeded in holding it without interruption for six hundred years. About the middle of that

² At Medina the pilgrims become 'guests of the Prophet,' subject to the tender mercies of the vicarious hospitality dispensed by his 'neighbors,' the inhabitants of that town.

period of their tenure, in 1517, the *Hijáz* shared the fate of Syria and Egypt, becoming a province of the Ottoman Empire. The Grand Sharif Muhammad *Abū'l-Barakāt* paid homage to Sultan Salim I, sending him on a silver platter the keys of the *Ka'bah*. Submitting to the military autocracy of the house of Othman, which borrowed higher luster from a moribund theocratic despotism molded on the orthodox Muhammadian last, the Grand Sharifs gradually divested themselves of the Shi'itic tendencies whose now unserviceable political drift had made them live on terms of intimacy with the Zaidites of Southern Arabia. Starting, as Sunnites of the *Shāfi'i*te denomination, a persecution of their former friends, their orthodoxy was, however, tainted with the laxity and abuses which human weakness had introduced into *Islām*, tarnishing its original precepts.

In 1770 a comet, traversing the heavens in the manner predicted by the poet *al-Fāsi*, portended great events. The teachings of the Sheikh Muhammad *Ibn 'Abd al-Wahhāb* (born in the *Najd* at some time between 1691 and 1703) had begun to incite a puritanic movement which was destined to stir *Islām* profoundly, growing in strength with the adherence, in 1742, of the Amir Muhammad of the *Banū Sa'ūd* at *Dar'iyyah*. Not less fanatical than the *Qarmatians*, the *Wahhābites*, those protestants of *Islām*, as they have been called,⁸ marched up to the Holy Cities for their work of purification at the center of corruption. Surrendered to them in 1803 and evacuated and beleaguered again, Mecca, like Medina, experienced bad days and the Grand Sharifate, then held by *Ghālib*, son of *Masā'id*, received a blow that nearly smashed its power. Sultan *Mahmūd II*, whose Turkish troops had been unable to reduce the insurgent reformers to obedience, charged Muhammad 'Ali, his Egyptian vassal, with the task of stemming the tide of their invasion. Muhammad 'Ali confided the command of the expeditionary force of ten thousand men he despatched for that purpose in October 1811, to his favorite son *Tussūn*, a youth of sixteen, whose indifferent generalship, though Medina was recovered after initial reverses, obliged him in 1813 to take the field himself. But it was only after *Tussūn*'s death that *Ibrāhīm*, another son of

⁸ As enthusiastic advocates of unadulterated monotheism, they call themselves *unitarians*.

Muhammad 'Ali, threw the Wahhābites definitely back, entering Dar'iyah, September 9, 1818, and conquering the Najd, where he left a division of his army under Ismā'il Pasha to keep them quiet. Their Amir 'Abd Allāh, great grandson of Muhammad, grandson of 'Abd al-Aziz, who had led them in their first successful campaigns, and son of Sa'ūd who had 'cleansed' the Holy Places, was deported to Constantinople and beheaded. The Sultan's dependence on aid from Egypt did not enhance Turkish prestige in Arabia which, until 1840, was governed, in so far as an orderly government existed, rather by his contumacious Viceroy in Cairo than by his Sublime Porte. But the Qatāda family profited by this state of affairs, reigning once more supreme in Mecca and domineering, as of old, a never clearly defined portion of the Hijāz and sometimes of the Yāman too, down to Hail.

The Amir Turki of the Banū Sa'ūd, son of the ill-starred 'Abd Allāh, effected about 1824 a reorganization of the Wahhābite community in the Southern Najd, choosing Riadh for his capital. Meanwhile, with the co-operation of Khālid Pasha, Ismā'il Pasha's successor, a rival tribe was coming to the front in the Northern Najd. They were the Banū Rashid who, driven into exile as the result of a feud with the Banū 'Ali, had cleverly turned the tables on that leading clan of the Jabal Shammar with the aid of the Banū Sa'ūd themselves, establishing their capital at Hail. The expedition to Riadh, undertaken in 1836 by order of Muhammad 'Ali, heightened the importance of the chiefs of the Banū Rashid. These, unscrupulous in their methods, while enjoying Egyptian and, after 1840, Turkish protection, repaid with base ingratitude the assistance they had been fain to accept from the Banū Sa'ūd. But the Wahhābite zealots did not lose heart, confident in the righteousness of their cause, giving tit for tat. Constant friction with their upstart betrayers was the result until the latter, having settled once for all with the Banū 'Ali in the North, resolved to break, too, the vexatious obstruction their forays and encroachments met in the South. So, in the beginning of the present century, under a Bin Rashid who arrogated the dignity of King of Arabia, they girded themselves to a grand effort and smote the Banū Sa'ūd hip and thigh, storming Riadh, which they made their southern capital. Encouraged by the success of their arms, the Banū Rashid

marched also East to expand their Arabian kingdom still farther at the expense of the Shaikh Mubārak of Kuwait.

This ambitious design wrought in the end their ruin, highly beneficial as it proved to the Wahhābites for, though the Sheikh Mubārak's men, reinforced by the Muntafiq Arabs of the lower Euphrates, after a victory which opened to them the gates of Hail, were surprised on their way back and badly beaten, the sly old fox of Kuwait persuaded the Amir of the Banū Sa'ūd to conclude an alliance with him for the overthrow of the common foe. Then there were many encounters full of the savagely daring feats of ancient Arabian warfare. Sometimes the Banū Rashid and sometimes the Banū Sa'ūd had the best of it, the theater of their strife and principal bone of contention being the border district of Kasim with the important towns of 'Anaiza and Buraida, centers of the lucrative trade in camels, horses and Indian merchandise that enriched the inhabitants, the Salaib, since the most remote times. At last the Wahhābites regained not only Riadh, by means of a bold stratagem, but almost the whole of the Najd. In the decisive battle, which took place in 1904, near the caravan route between Kuwait and Mecca, the 'King of Arabia' of the Banū Rashid was slain, his body and that of his horse falling, pinned together by an arrow, and being trampled underfoot by his followers in headlong flight before the onslaught of the Banū Sa'ūd 'whose spears sought lodgment in the breasts of their enemies so that when they went in with the naked sword, they found the field already cleared and small resistance offered.' This is in outline the history of the rehabilitation in their fastnesses of the Wahhābites, whose present Amir of the Banū Sa'ūd lives at peace, for the time it will last, with the Banū Rashid, notwithstanding the latter's Amir maintaining his claim, with the assent of the Porte on the *divide et impera* principle, to so much of the Northern Najd as goes by the name of Shammār. Concerning the rigid tenets and austere habits of the Wahhābites we have the word of a recent traveler in those parts⁴ that most of them have been dropped or relaxed. Smoking, for instance, is privately indulged in, and during his stay at Riadh as a guest of the Amir, seldom a night passed without one of the palace underlings visiting him to beg a little of the 'shameful,'

⁴ Captain G. Leachman of the Royal Sussex Regiment in the *Geographical Journal* of May, 1914.

as they call tobacco. Attendance at the five daily prayers was however enforced with the rod.

So much for Central Arabia, which is no more the Padisha's or anybody else's now than it ever was in its troublous past. Turning to the Yaman we see the same conditions of tribal animosity and armed conflict prevailing, although the Turks have nominally been in control (hardly even that in Hadhramaut) since they occupied that territory in 1872, thanks rather to the wily policy of General Mukhtar Pasha and Colonel Ashraf Bey than to their military exploits. It is true that the Yamanites forgot for a while their rivalries to support the Amir Muhammad Yahyā, son of the eminent Imām of Sanā, Sayyid Hamid ad-Din, but the strain on their natural pugnacity was too great and soon their internal dissensions again handicapped them sadly in their passive resistance to the Turks. Even when in 1904 this passive resistance began to flame up in an open revolt which taxed the gallantry and discipline of the seventh Turkish army corps to its utmost, throughout the vicissitudes of the Turco-Arabic collision in the Yaman from the memorable siege and fall of Sanā to the recovery of that stronghold by Ahmad Faizi, August 3, 1905, lack of cohesion remained the worst obstacle that confronted the Arabs in their exertions to free themselves from the Turkish yoke. That yoke sat otherwise lightly enough, witness the possibility of violent antagonism which culminated in bloody affrays between contending factions of the theoretically subject population, practically at liberty to found quasi-independent kingdoms in the Sultan's domains for the pleasure of fighting over them to their heart's content. And as it was in Central Arabia and in the Yaman it was in the Hijāz where the 'Asir tribes rose in rebellion under the leadership of their principal Shaikh al-Idrisi, where the Badawī, esteeming themselves the genuine lords of the soil, cared neither for foreign rulers nor for self-constituted kings of their own race and made a very profitable business out of their pretended right to levy a toll from merchants and pilgrims for the privilege of using the caravan tracks; attacked the Hijāz railway and broke it up whenever they thought fit, because they considered it an infringement on that right, utterly unmindful of the Turkish officials, obeying or defying the Grand Sharif according to the changing character of their relations with Mecca.

Since the days of Sultan Salim I, the Grand Sharifs or, as the official Turkish nomenclature styles them, Amirs of Mecca, have been formally appointed by the Porte. In most cases their appointment was, however, really decided in a conclave of the chief members of the Qatāda family, whose nominee, duly confirmed, knew how to uphold his virtual independence, and the Padisha had to resign himself to a predicament which kept the Hijāz from being incorporated with the Ottoman Empire on the footing of an ordinary vilayat: very exalted personages, as they say in the Maghrib, are sometimes severely harassed by insects of altogether inferior size. Though, after the Egyptian interregnum as before, a Turkish governor was provided for the express purpose of keeping within bounds the Meccan insect of the 'Alid genus and Qatāda species, its persistent activity occasioned a good deal of distress, especially in his Khalifal capacity, to the Sick Man at the Golden Horn, a sufferer already from too many too officious physicians on European thrones. In 1840 the Grand Sharif Muhammad Ibn 'Aun² was restored to the Hijāz after a four years' residence in Cairo as the unwilling guest of Muhammad 'Ali. Intrigues of plotting kinsmen at home and in Constantinople compelled him in 1851 to resign in favor of the intriguant-in-chief 'Abd al-Muttalib. Yet in 1856 he was on top again to be succeeded in 1858 by his chivalrous son 'Abd Allāh, who with 'Ali, another son, had been in charge of the daily routine of the Sharifate during the ultimate term of their aged sire's exercise of authority. Hussain, still another of his sons, succeeded 'Abd Allāh in 1877, but three years later, in 1880, we find 'Abd al-Muttalib installed once more.

At 'Abd al-Muttalib's final removal in 1882 (he died in 1886), 'Aun ar-Rafiq, a fourth son of Muhammad Ibn 'Aun, was appointed notwithstanding the opposition of his younger brother Abdilah, countenanced by the Turkish governor Othman Pasha. The discord between this strong, capable deputy guardian of the

²During Muhammad Ibn 'Aun's first term of office the influential Sharifs of Mecca in touch with the government, began to desert the Shafi'ite for the Hanafite camp. By the end of the nineteenth century they were all Hanafites, which did not prevent their supporting the wishes of the Shafi'ite population in ritualistic matters against the occasionally excessive sectarian zeal of the Turks. See Soucek Hurgouje, *Mecca*, 1, which gives a comprehensive history of the Grand Sharifate.

Holiest and the new Grand Sharif coming to a head, the latter petitioned the Porte for the obnoxious Wali's recall and moved to Medina. Commanded to change places with Jamil Pasha, governor of Aleppo, Othman Pasha left, and 'Aun ar-Rafiq returned in December 1896 to his post. Jamil Pasha and Safwat Pasha and a few more officials of that stamp were no match for the energetic, wilful Prince of Mecca whose imperious temper they had to curb. One after another failed ignominiously, until the tactful, adroit Ahmad Rātib effected a sort of compromise. 'Aun ar-Rafiq was gathered to his fathers in 1905, and his aforementioned brother Abdilah, nominated as his successor, died shortly afterwards when under way from Constantinople to the full realization of a life-long hope. 'Aun ar-Rafiq's nephew 'Ali, appointed in Abdilah's place, hastily departed from Mecca, following the example set by his Turkish supervisor Ahmad Rātib, when the news of the revolution of 1908 reached him, and took refuge in Cairo. Thereupon Husain Ibn 'Ali, another nephew of 'Aun ar-Rafiq, stepped in without concerning himself about the Porte's approval. His assumption of the title of Grand Sharif of Mecca already being a challenge to Turkish suzerainty, he went still farther by proclaiming on June 27, 1916, his complete independence as King of the Hijāz, chasing away the Turkish garrisons first of his capital, of Medina, and Jeddah, then those of Tāif and Yambū'. This epoch-making event, combined with the recent developments in the Near and Middle Eastern theater of the war, may have a far-reaching effect on the consequences of its final outcome.

BRIEF NOTES

A Word with reference to 'Emperor'-Worship in Babylonia

Professor Mercer has rendered a distinct service to his colleagues by massing in his article '*Emperor*'-Worship in Babylonia (*JAOS* 36, 360-380) many widely scattered bits of evidence on the subject. The writer regrets, however, that he is obliged to dissent from the main thesis of that article—a thesis which, stated in Professor Mercer's own words, is that 'Babylonians were always conscious of the humanity of their rulers, and though the distance between a god and a man was not great, yet they never seem to have mistaken the one for the other' (p. 377). In other words, he seeks to prove that there was no such thing as emperor-worship.

Professor Mercer's treatment of the material which he cites does not impress the reader as altogether unbiased. At every step of the argument effort is made to minimize the force of the facts which are cited. The writer is inclined to think that a fair-minded reader who knew nothing of the subject would be led to think that there must have been some real worship of emperors or kings, when the determinative for god is so often prefixed to their names. If, however, we were to grant that the evidence accumulated by Professor Mercer is not decisive, and that it is fairly capable of being interpreted as he has interpreted it, it must be noted that he has overlooked some very important evidence, and that the facts thus overlooked are fatal to his theory. I refer to the proper names contained in the *Haverford Library Collection of Cuneiform Tablets*, Parts I-III, Philadelphia, 1905-1914. Part III contains a list of nearly 3,300 persons, while Huber's list, the only one for the Ur-dynasty that Professor Mercer seems to have consulted, contains but about 5,100.

In Part II of this work, pl. 53, there is published a tablet (no. 10), which is dated in 'the year after the *E-bā-ša-īš* [read by some *E-kū-ia-īš*] of Dagan was built.' This was certainly during Dungi's lifetime. Thureau-Dangin thought in 1907 that it was the 39th year of his reign, while Myhrman in 1910 thought it his fiftieth year. The exact year is for our present

purpose irrelevant; it is enough that it was during the lifetime of the king. The tablet is a pay-roll, and the following men received stipends: *Lü-²Dun-gi* (Man of the god Dungi), *²Dun-gi-he-gāt* (May the god Dungi protect), *⁴Dun-gi-ra-kalam-ma* (For the god Dungi is the land), *⁴Dun-gi-kalam-ma-hi-li-bi* (The god Dungi—the land is his delight), *⁴Dun-gi-ā-urn* (The god Dungi is the reward of the slave), *⁴Dun-gi-a-du-kalam-ma* (The god Dungi is the counselor of the land), *⁴Dun-gi-ki-har-sag* (With the god Dungi is great favor), *Ka-⁴Dun-gi-ib-ta-ē* (The word of the god Dungi goes forth), *Ama-⁴Dun-gi-e-⁴Ur-ru* (The mother of the god Dungi is the goddess Urru), and *⁴Dun-gi-ā-nam-ti* (The god Dungi is the food of life). Can any one read these proper names¹ borne by men in Dungi's own lifetime, and doubt that real 'emperor'-worship existed in Babylonia?

The tablet which contains these names does not stand alone, but I will take time to cite but one other. *HLC* 52 (Part I, pl. 12) contains (obv. 1, 9) the name *Tab-²Dun-gi-⁴Nannar* (The god Dungi is the twin² of the god Nannar). This tablet is dated in the year Urbillum was destroyed, which was, according to Thureau-Dangin, Dungi's 43d year, but according to Myhrman, his 55th. The tablet was in any case written while Dungi was still living, and the name cited is alone sufficient to overthrow Professor Mercer's whole thesis.

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Takku

In publishing a preliminary translation of a new account of the creation of man (in this JOURNAL, 37, 36—40), the writer warned readers (p. 26) not to regard the rendering as final. The tablet is carelessly written and in parts has suffered from breaking. In working over the text again I have reached the conclusion that the divine name read *Tikku* should be read *Takku*, and that it is identical with the name that Langdon read

¹ The writer called attention to these and many other names which throw light on Sumerian religious conceptions in this JOURNAL, 34, 315-320.

² See the writer's *Origin and Development of Babylonian Writing*, No. 144^o.

Tagtug in his so-called Epic of Paradise. The new text accordingly affords another welcome source of information concerning an enigmatical character that has been the cause of earnest discussion.

The volume in which the cuneiform text is to be published will, I hope, be in the hands of scholars before the end of the year. The readings of one or two other passages will be improved. The new readings will, however, only bring out more clearly the character of the document as already set forth in the JOURNAL.

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The Words 'law' and 'witness' in the South Arabic

The South Arabic פָּרָח is to be interpreted from the Ethiopic *fetḥ* and translated 'law.' This gives a satisfactory explanation of the opening phrase in Halévy's text 374 (also in Hommel, *Südarabische Chrestomathie*, p. 109), שָׁכַן פָּתָח 'he established a law' (where Hommel has 'he instituted a *caus!*'), interpreting the verb as a loan from the Assyrian *šakānu*. Then in Glaser 282 (Hommel, p. 115), line 7 contains the word twice, once in the context, לְנָזֵן פָּתָח, which may be translated 'to engrave this law.' This translation of פָּתָח is corroborated by the succeeding part of the inscription.

There follows a date formula in the usual terms of an eponym. Then comes the word סְמִיעָה followed by two personal names, 'WS-Ili du-GND and Y'WS-Ili du-RPZN. I assume that סְמִיעָה means 'witness' (*sâmi'*), as in the Ethiopic, and that the word introduces the attestation of two witnesses (in the singular, as in the Elephantine papyri). This explanation is borne out by what follows, in which now for the first time we can get a consecutive reading for a good line of the inscription: וְלוּ וְעַתָּה רְסֵחָה סְמִיעָה הָנָזֵן וְרְפֵעָן בְּצַחְפָּה אַסְכּוּעַסְכָּן. This is to be translated: 'And assisted [in the French sense] and recorded and gave hearing the two witnesses of this law he-of-RPZN and he-of-GND in their witness books' (*biyuhufi asmâ' isumân, yuhuf* being the plural of the good Arabic *sahifat*). This last phrase occurs also in Halévy, 199 (Hommel,

p. 102), and 51, lines 8 and 19; also in 244, 'the witness is in the gods of Ma'an.'

The illumination of these terms throws light upon the legal processes of the South-Arabians. A law was published in stone and also attested by witnesses in their 'books' (of palm-leaves!). One thinks involuntarily of the episode in Isaiah 8. 1-2, which may have been an imitation of public usage.

P. S. Since writing the above I note **בְּאַכְלָר וְצַחַפָּת CIS 314. 8**, which Halévy (*R. Sém.* 4 (1896), p. 83 ff.) correctly translates *verbo et scripto*, rejected by the editor Derenbourg. The passage has to do with written orders, which are dated, from the kings concerning the presentation of certain votive offerings. In line 9 I would interpret **לְצַחַפָּה** gerundively, *scribendo*.

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וּ as an Old Plural Ending of the Hebrew Noun

The *וּ*, *וּ*, as a plural ending is recognized in Hebrew in the verb only. But the Arabic, the Assyrian of the First Dynasty age, as well as the Old Egyptian (cf. Erman, *Ag. Gr.* § 189) use it also as a plural ending in the noun.

But traces of the old *וּ* in stat. constr. are still found in some passages of the Bible. It is in the first place found in the Ketib, which very often preserves older forms, but sometimes the old plural ending is preserved even without being modified by the Qere. Its true character as a plural ending can then be recognized either by the context of the passage in question, or by the testimony of the old versions.

The following are the passages in which the *וּ* as a plural ending has been preserved in the Ketib only: Jos. 6. 9: **הָבָרָו שָׁמִים**, Qere: **הָקָעָם**. Ketib: Is. 47. 13: **הַקְשֵׁת הַשּׁוֹפְרוֹת**. Ketib: Ps. 119. 79: **רִאֵד וְרוּעֵעַרְתִּיךְ**, Qere: **רִיְצָעַ**. Ketib: 1 Chr. 2.55: **יִשְׁבֵי יִשְׁבֵן**, Qere: **יִשְׁבֵן יִשְׁבֵן**.

The plural ending *וּ* is employed not only in the nominative, but also in the genitive and the accusative. Just as the plural

¹ Here perhaps belongs also 1 Chr. 6. 11: Qere: **נָנוּ אֶלְקָנָה**.

ending *im.* (ă), originally used for the genitive and accusative, has supplanted the original nominative ending *in.* (ă), so also the ă is found as plural ending in the genitive: 2 Kings 17. 13: בֵּין־בְּנֵי אָהָרֹן: Qere: בֵּין־בְּנֵי אָהָרֹן. and in the accusative: Hos. 8. 12: אָכַתּוּ לְרַבּוֹ תּוֹרַתִּי: Qere: לְרַבּי. It occurs also in the part. pass. 2 Sam. 5. 8: שְׁנָאָה נֶפֶשׁ דָּוד: Qere: שְׁנָאָה. and in the dual, Eze. 1. 8: וְיַדְוָ אָדָם: Qere: וְיַדְיוֹ.

There are also passages in which, as already mentioned, the plural ending ă in the construct state is not indicated as such owing to its being changed in the Qere to the regular plural constr. ending ă. In such cases we have to look for other evidence to prove its plural character:—

Gen. 32. 32: פְּנִים = פְּנִיאָל = פְּנִיאָל. 31 from the plural (1 Chr. 8. 25: פְּנִיאָל). Qere: סְדֹד כָּר. Lev. 6. 3: פְּנִיאָל. Onq. and Jon. render it as סְדֹד. Perhaps also in 2 Sam. 20. 8: סְדֹד = סְדֹד. וַיַּאֲכַח חָנָר מְדוֹד לְבָשָׂר. Jer. 31. 24: אֲכָרִים וְנִסְעָו בָּעָרָה. Aq. Sym. Jon. and Vulg. render נִסְעָשׂ as a participle = נִסְעָשׂ. Ps. 107. 4: חָשׁוּ בְּמִדְבָּר. The parallels of verse 10, 19, 21, 23, 25, make it probable that חָשׁוּ is also a participle = חָשָׁשׁ (which reading has already been proposed; cf. Kittel ad. loc.).¹

A plural ending ă was already recognized by S. D. Luzzatto

¹ Targ. Jonathan, ed. Lagarde, and the Syriac version read: בְּלִבְנֵי אָהָרֹן.

² The endings of the cases have frequently been disregarded; cf. e. g. Tuch, 'Sinaïtische Inschriften,' *ZDMG* 3 (1849), p. 138: 'Rücksichtlich des Plurals lässt der Status constr. '22 (Beer 133 ff.) = **בְּנֵי** nur soviel erkennen, dass man u. **בְּנֵי** dem cases nach nicht unterschied.'

³ The Samaritan reads: **תְּבָנָה**—To Onqelos = cf. Nachmanides ad. loc. who thinks that Onq. considered **תְּבָנָה** as a collective; but then we would expect **תְּבָנָה**.

⁴ So perhaps we have to explain the rendering of the LXX of Eze. 31. 17, as **νερδεῖται λαβαῖται καὶ** **νερδεῖται λαβαῖται** (so also the Syriac version) in which case we shall have only the transposition of the 1st and 2nd clauses; and the rendering of the Syriac version of Ps. 97. 10: **שְׁנָאָה** as **שְׁנָאָה יְהִי** (as also a few MSS.).

in the much discussed **כלה מקלוני** Jer. 15. 10. In a letter dated December 9, 1836, he writes:

"**כלה מקלוני**. נראה לי לקרוא מקלוני. מקללים אותן. כמו כהלווד ירושמי ורפואי פ"ג דאין מחדרון" שהוא כמו מחדרן תר".

In the Aramaic parts of the Talmud **ו** as plural ending of the participle occurs very often, cf. Margolis, *Lehrb. d. Aram. Spr. d. Talmuds*, p. 40 ff. Margolis, it is true, considers it as a later form developed by analogy of the perf., but may we not assume that it represents the old plural ending **וְ**?

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Burkhan

With reference to my note on the word *Burkhan* (in the JOURNAL, 36, 390—395) I now note that R. Gauthiot (*Mélanges Sylvain Levi*, Paris, 1911, p. 112) had already opposed the theory of Baron A. von Stael-Holstein of Petrograd. Gauthiot regarded that etymology as "very doubtful," and remarked (in the same manner as I did) that compounds of this kind do not exist in Turkish. Moreover, he justly emphasized that the historical facts run counter to such a conception of the term, and that the history of the expansion of Buddhism in the Iranian regions toward the northwest of India and the fluctuations of Chinese influence in Central Asia render that theory rather improbable. While regretting that I overlooked Gauthiot's comment, I am glad to find myself in full accord with the opinion of that eminent philologist, whose premature death we have every reason to deplore.

In regard to the Manchu term *Fučhi*, Professor P. Schmidt, now president of the Oriental Institute of Vladivostok, has been good enough to write me that he regards **-i-hi** as a suffix added to

מערבי, p. 361. So also Steinberg in his Hebrew Grammar בילוּם הַאֲוֹרִים בְּלֹבֶבֶב, but in his lexicon בְּלֹבֶבֶב, he suggests to read בְּלֹבֶבֶב (Baer reads בְּלֹבֶבֶב) but we would rather expect the imperfect instead of the perfect, cf. also Kittel ad loc.—The use of the participle with the plural ending **ו** when combined with a suffix occurs also in the ס"ב for Shebu'oth: המלכ'ישים אויהן-הפלנ'שן-לכש ער'ם.

the stem *Put*, pointing to such analogous formations as *guč-i-hi*, *giuč-i-hi*, *sol-o-hi*, *tarb-a-hi*, *tarb-i-hi*. This explanation is quite satisfactory.

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PERSONALIA

Professor JOHN WILLIAMS WHITE, of Harvard University, died May 9, 1917. He was professor of Greek at Harvard from 1884 to 1909, and was one of the founders of the American School at Athens. He became a member of the American Oriental Society in 1877.

MORTON WILLIAM EASTON, Ph.D., Emeritus Professor of English and Comparative Philology at the University of Pennsylvania, died Aug. 21, 1917. He was born in 1841 in Hartford, Conn., and completed the course in medicine at Columbia in 1865, but returned to philology, taking his degree in Sanskrit at Yale.

He was called to the classical chair at the University of Tennessee in 1873, and came to the University of Pennsylvania in 1880. His subjects ranged from Sanskrit to English, in all of which he was a profound student and a most distinguished teacher. He directed the presentation of the first Greek comedy to be given in this country, the *Acharnians*, presented in 1886 by students of the University of Pennsylvania.

TIGLATH-PILESER I AND HIS WARS

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Early Assyrian history is by no means attractive to the student who most enjoys historical problems. The annalistic form of inscription has not yet developed and the narrative tends to thin out into bare lists of rulers or records of building operations, broken here and there by a few high-sounding titles which speak of not far distant conquests or of equal struggles with the former suzerain Babylon. Careful study may give a certain amount of life to the picture, but, when all has been said, true history begins only with the first Tiglath-Pileser. For the first time we have true annals, and from these annals we can construct a picture with the details necessary to make the account live.¹

At his accession, Tiglath-Pileser found a small enough country. The days of Tukulti-Ninib were past and Assyria had since seen serious losses on all sides. Least dangerous were those on the south for Babylon too had suffered decay, though still strong enough for an occasional raid. The boundary was back again at the Lower Zab and all the debatable ground was in Babylonian hands. On the west, Assyrian control ended with the steppe across which Arabs from south of the Euphrates roamed at will. To the north, the frontier was dangerously near, the first line of the foothills, and to the east it is not clear that all the Assyrian triangle had yet come into his hands. Raids there might be into the mountains to north and to east, but of conquests there was as yet none to boast.

The half century of decline had given opportunity for various Asianic peoples to work their way into the regions which had once owed at least nominal allegiance to the Assyrian monarchs.

¹ The present paper has two main purposes: to interpret the wars in the light of the broader considerations of a political nature and to study the topography. The former is the natural development of the preliminary source study already published in the author's *Assyrian Historiography*. The latter incorporates investigations made in connection with the Cornell Expedition which in 1908 visited many of the sites here discussed.

Among these were the *Mushki*, fated to give their name to the great eastern Asia Minor city of *Mazaka*, long after they themselves as the *Meschoi* of the classical authors had been forced into the mountains far to the north.² They had 'come down,' probably from the vicinity of the modern *Harput*, whence another branch seems to have proceeded up the valley of the *Tokhma Su* to settle *Mazaka*, and had occupied the lands of *Aixi* and *Purukuzzi*, the level and fertile triangle stretching down from near the source of the West Tigris to the great bend at *Amedi*. It was bad enough to lose this rich agricultural plain, not to speak of the copper mines in the hills just to the north, but when to the loss of this region which 'paid the tribute and tax of the god *Ashur*' was added that of *Qummuh*, the even more fertile country between the Tigris and Mt. *Kashiari*, it was clearly time to act.³

At the very 'beginning of the reign,' *Tiglath-Pileser* 'collected his chariots and his foot soldiers' and marched forth from his capital of *Ashur*. Straight across the steppe he went to Mount *Kashiari*, the first range of hills which stretched from east to west along the northern rim of the plain.⁴ Through this he hastened, in spite of the difficulty of the country, and engaged with their five kings and their twenty thousand troops in *Qummuh*. 'The bodies of their warriors like the *Storm God* I hurled down. Their blood in the ravines and on the heights of the mountains I made to flow down. Their heads I cut off, by the side of their cities like grain heaps I piled up. Their spoil, their property, their possessions to an unnumbered quantity I brought out.'

² A trace of this eastern branch of the *Meschoi* is found in the Biblical table of nations, Gen. 10, 23, where the Greek *Mosoch* and the *Meshek* of the parallel 1 Chron. 1, 17 show that here too we must read *Meshek* for the unique *Mash* of the traditional text. The context proves that it is in Mesopotamia, that is, not far from the location postulated by the *Annals* of *Tiglath-Pileser*.

³ Reached by passing through *Kashiari*, the modern *Tür 'Abdin*, and then crossing the Tigris, *Qummuh* must be the level country south of the east-west course of the western Tigris between *Diarbekr* and *Bassān Kēf*; cf. Rawlinson, *Monarchies*, 2, 64, n. 8. It should not be confused with the later *Commagene* to which it gave its name.

⁴ Maspero, *Hist. Class.* 2, 642, n. 3, has seen that the route must have been to *Sinjir* and around the western end of the range.

While Tiglath-Pileser thus marched through the Qummuh region, plundering and burning, the wretched inhabitants fled across the Tigris to the fortress of Shereshe. But the Assyrians pursued them 'through the difficult mountains and the blocked paths,' hewing a way for the passage of the troops with bronze axes, crossed the Tigris, and took the stronghold.* Then, still on the north of the river, he was forced to fight with the hordes of the Qurhi who had advanced to the aid of the people of Qummuh. These too were defeated and the river Name carried their dead bodies to the Tigris.* The chief of the Qurhi, who bears the very 'Hittite' name of Kili-Teshub, the son of Kali-Teshub, who was also known as Irrupi,[†] was captured in the battle, and with him his wives, his sons, and his retainers, a family group such as we still find to-day among the Kurds of this very region. Perhaps as much interest attaches to the booty, 180 bronze vessels for unguents, five copper jugs, gods of gold and silver—further proof, if proof were needed, that we are not far from the mines. The fort Urratınash, situated in Mount Panarı, was in the hands of another chieftain with the equally Asianic name of Shadi Teshub, the son of Hattuhi. When Tiglath-Pileser crossed again to the south side of the Tigris, Shadi Teshub came into the Assyrian camp and without further hesitation embraced the feet

* Sachau, *ZA* 12. 51, identifies Shereshe with the Sareisa of Strabo 16. 1. 24, which may be the Shurishdash of the Menash inscription, Sayce no. 32, as well as the Hittite city of Sayce, *PSBA* 21. 196, but the context in Strabo speaks for a city more to the north. Sayce sees in it also the Saris of the Hittite treaty. It has nothing to do with the Sirishai of Shalmaneser III, Mon. 1. 18, which is in Kirruri and so east of the East Tigris.

[†] The earlier identification of Name with Nimme must be given up, as the Tigris Tunnel Inscription, Lehmann, *Sb. Berl. Akad.* 1900, p. 625, gives this as *Tu-um-me*.

* Cf. Jensen, *ZDMG* 48. 475.—In the Scheil fragment, *KT* 22. 157, 'Hattu completely . . . tribute, tax, and . . . ' Teshub king of Hat [te]' comes immediately after mention of Arvad and before an expedition against the Ahlame or Arzmaean nomads. Streck, *ZA* 18. 186, n. 2, restores the name as Kali Teshub and Winckler, *OLZ* 4. 296, would then be justified in taking it as proved that Qummuh and Hattu are equivalent. Unfortunately, the contexts of the two passages are entirely different and the passage in the Scheil fragment follows an event which cannot refer to any of the first six years. Therefore the theory fails.

of the conqueror. His sons and the members of his clan were taken as hostages and we hear again of the bronze unguent-holders, of the copper jugs, and of the great copper sacrificial bowls, some of which were considered valuable enough to be presented to the Assyrian deities.⁹

The accession of Tiglath-Pileser must have taken place early in the year, for he was enabled to carry on a second campaign in this 'beginning of the reign' against the land of Ishdish, which in this century was located in the rough country forming the eastern part of Mount Kashiari.¹⁰ With his foot-soldiers and thirty chariots—no commentary is needed to show how small this terrible army really was—he marched through mighty mountains and rough country until he reached Mount Aruma.¹¹ 'I abandoned my chariots, the head of my warriors I took, like a shepherd I was bold, on the peaks of the high mountains triumphantly I advanced. The land of Ishdish like the deluge ruins I overthrew.'¹²

The second year, or rather, to use the Assyrian method of reckoning, the first of the reign, saw Tiglath-Pileser again on the northwest frontier. Qummuh had been sufficiently tamed the preceding year to allow an advance into the lands of Alzi and Purukuzzi which were now formally added to the Assyrian

⁹ For the earlier events, we have two nearly parallel accounts, Ann. 1. 70-88 and 1. 89 - 2. 16. Pancritius, *Kriegsführung*, 51, works out a *Dreibund* of tribes which must be met by three Assyrian divisions, but what she takes as signs of separate armies are in reality indications of incomplete joining of sources, still further confused by the hazy idea the scribe had of the whole operation and by the desire to pad it out as much as possible for the greater glory of the king. The country does not permit, much less demand, such a scheme of separate armies as Pancritius, following Billerbeck, has devised. Pancritius, 54, is right in making the crossing south of Amedi. It may well have been at Baital Tepo near the bend where we found a deep ford.

¹⁰ Usually read *Mil-dish*, but for Ishdish and Uishdish cf. Olmstead, *Sargon*, 105, n. 12. The location there given, naturally, is correct only for the days of Sargon, when, as in so many other cases, the names had wandered far.

¹¹ Not to be connected with the Urumi or Arime, the Aramaeans, with the Kirku mountain Arua of Ashur-nasir-apal, Ann. 1. 60, which was north of the Tigris, or with the classical Urimi, as Schaefer, cf. *Z.A.* 14. 168.

¹² Ann. 2. 63 ff.

domain. Then came the winning back of Shubarti, which had been occupied by another group of Asiatic peoples, the Kaski, the Urumi, and the men of the land of the Hatté, in the last of whom we are probably to see a remnant of the men from the great Hittite empire, driven out of Asia Minor by the pressure of fresh hordes of Indo-Europeans. Shubarti was won back with a booty of 120 chariots and of 'yoked teams,' another trace, no doubt, of Hittite influence, since we know what part the chariot played in their warfare. To end the campaign, Quummuh was once more ravaged and then added to the borders of Assyria.¹³

The third year, the war was carried on somewhat more to the east but still among the Qurhi. The first attack was on Haria, the army passing between Mount Idni and Mount Aia. When the mountains were reached, 'sharp as the point of a dagger,' the chariots were again left behind and the march continued on foot. A battle with the Qurhi took place on Mount Azu and then the king could attack the cities on the mountain-tops and those of Haria at the foot of the mountains. The campaign was a mere raid, for we have no decisive results mentioned and we may be sure that none were secured.¹⁴

The other campaigns of the year are equally unimportant. First was one against the mountain land of Adaush on the north-

¹³ Ann. 2. 89 ff.—The Kaski occur again in 738, Tiglath-Pileser IV, Ann. 153, where Dad-ibni of the city Kasku pays tribute. He is mentioned between the rulers of Melidda, the classical Melitene, and Tabal. There can therefore be no doubt as to the correctness of the identification of Kasku with the classical Ciscicus and the modern Kisken. Ramsay, *Cities and Bishoprics*, I. xiv, n., had already identified this last with the Egyptian Keshkesh. A still earlier appearance is found in the Aleppo tablet of the Hammurapi period, Sayce, *PSBA* 29. 91 ff.

¹⁴ Ann. 2. 35 ff.—Haria is on the eastern border of Qurhi as is shown by the identity of Mt. Idni with the Mt. Matni of Ashur-nesir-apal, Ann. 2. 113, where the *shad-mat* seems to have lost one of its signs by ditto-raphy; of Aia with Iain of Ann. 2. 116; as well as by the survival of Azu in Ise'ir Ozzi north of the Ashyt Dagh. Perhaps it is the Axoni of Plin. 6. 118. The other mountains are Shulra, Shern, Shelgu, Arzanibis, Urusu, Aniktu. We may compare the Arramon River, on which is the town Bibas, Theophyl. 1. 15. 15; 2. 1. 5 ff.; 5. 4; and for Aniktu the Axone of the Ravenna Geographer.

eastern boundary.¹⁴ Then came the subjugation of the lands of Sarauash and Ammaush, located near Mount Aruma. Another of these brief mentions is of the conquest of the lands of Isua and Daria, perhaps to the east of the last.¹⁵ If any are to be attributed to our monarch himself, it should be the one into Median territory. The Lower Zab was crossed well up in the mountains, the lands of Murattash and Sarandaush which lay within the mountains of Asaniu and Atuna were ravaged, the city of Murattash was taken at sunrise in the third part of a day, and the booty included sixty bronze unguent vessels and thirty talents of the same metal.¹⁶ Finally, we have a campaign against the land of Sugi, a part of Kirhu, which we may also admit with some probability to have been a personal expedition of the monarch. Six thousand troops from here and from Hime, Luh, Arirgi, Alamun, Tummi, and 'all the wide extending Qurhi,' were defeated in a battle where only foot-soldiers could be brought into action. Sugi was plundered and twenty-five of its gods carried off to grace the temple of Belit and the other gods of Ashur.¹⁷

In the king's own words, the objective of the next campaign is thus described: 'To the lands of the distant kings who were on the shore of the Upper Sea, who had never known subjection,

¹⁴ Billerbeck, *Saleimania*, 15, places Adauash in the mountains south of Khoi, comparing Ashur-nasir-apal, Ann. 1. 55, where tribute of Adauash is received in Kirru. Strack, *ZA* 14. 102, thinks the geographical order demands a site near Haria, but we have here no geographical order at all.

¹⁵ We may compare the Surra of Ashur-nasir-apal, Ann. 1. 46, and the Dirru of 3. 100.

¹⁶ Sarandaush has been well identified by Maspero, *op. cit.* 2. 616, n. 3, with Surtash, a side valley of the Lower Zab.

¹⁷ Ann. 4. 7 ff.—Sugi is the Saqa of Kirhi in Tabl. 4 and the Sakka of Tiglath-Pileser IV. Hime seems to be the Himu of the Nairi list, Ann. 4. 77; Tabl. 1. Luh is the Halu-Luha of Ashur-nasir-apal, Ann. 1. 103, according to Strack, *ZA* 13. 89. As Halu-Luha is the key position for this section of the country, the other sites are located approximately. Alamun must be compared with Mt. Elamuni, Ann. 3. 68, in Muari, and the land Ummuni, Ashur-nasir-apal, Ann. 1. 55, cf. also the Mt. Elama on the road to Nairi, Ann. 4. 53, and 'the Upper Zab which the men of Nairi and Kirhi call Elamuni,' Sargon, Tabl. 323. Only a situation east of the Tigris between Seri and Jezire will satisfy all three passages. Tummi is read instead of the usual Niimni to identify it with Tomma, generally read as Nimme, *cf. above*.

Ashur my lord sent me and I went. By difficult roads and steep passes which no former king had known in their recesses, by blocked roads and paths which were not open, I traversed sixteen mighty mountains, in good country in my chariots, in difficult with axes of bronze I opened a way. Plane trees, the wood of the mountains, I cut down and I made pontoons for the advance of my troops.¹² The line of march was up the East Tigris to the south shore of Lake Van¹³ and then west through the fertile plain to the north of the mountain rim. Crossing the East Euphrates, Tiglath-Pileser fell upon a confederacy of twenty-three princes, whose territory extended from Tumme to Daiaeni. Pursuit was continued to Lake Van, the country was ravaged, and cattle, for which the country has always been famous, were carried off.¹⁴ The captured chiefs were returned at once to their lands, all but Seni of Daiaeni, apparently the leader, who was

¹² Unless, comparing the location of Tumme in Ashur-nasir-apal, Ann. 1. 46, we assume that he went due east into the mountains and thus to Van.

¹³ Ann. 4. 49 ff.—Actual count of the name lists gives twenty-three princes. In 4. 96, this is increased to the round number sixty and scholars have as usual accepted the higher number. For example, Paneritius, *Kriegsführung*, 63, thinks the thirty-seven princelets not accounted for in the list of twenty-three were defeated in detail later on. The sixty should be accounted for on the ground of the higher, not the military criticism. An intermediate stage in the development is shown in Tablet 2, where we have thirty, half of the unit round number. The list in 4. 71 ff. is as follows: Tumme, Tumbe, Tuali, Qindari, Uruia, Uzamuni, Aadiabe, Pilajinni, Aturgini, Kulibazzini, Shinibirni, Himm, Paiteri, Ulram, Shururun, Abassi, Adaeni, Kirini, Albaia, Ugina, Nazabila, Abarium, Daiaeni. It seems to follow geographical order, as the briefer documents all say 'the broad lands of Nairi from Tumme to Daiaeni.' The Melzgerd inscription says the expedition was made to Daiaeni, which would indicate it was set up in the country last reached. Daiaeni also occurs in Shalmaneser III, Mon. 2. 46, and as Dale, without the ending, in Sennacherib, Prism, 4. 3, which show it near Manna. As Dianish, it is frequently mentioned in the Halidian inscriptions, which show it north of Lake Van and not far from Melzgerd. Tumme was reached by Ashur-nasir-apal before Kirruri, Ann. 1. 46. With Paiteri, Sayee, *EP* 1. 106, compare the land of Puterish of the Halidian records, in the Palu region, and Kulibazzine with the Halidian *barsine*, 'chapel.' Shu-ru-ri-a may be read Shu-shup-ri-a, and looks like a sort of ditto graphic error for Shupria. Abaeni may be the Abai of H. 509, a letter of Sargon's time, with references to Shupria, Kulimmeri, Bulum (Palu), cf. Tafseem *AJSL* 23. 323, and the Abunish of Sayee no. 27. 12; Hommel, *Gesch.* 528. Adaeni seems a form of Adanish.

taken to Ashur, shown the Assyrian might, and sent home a more or less fervent worshiper of the Assyrian gods. Hostages were demanded of all and a regular tribute of horses and cattle was fixed. At the farthest point of advance, at Melazgerd north of Lake Van, Tiglath-Pileser caused to be carved on the rocks an inscription which has survived to our own day.²⁰ That such an expedition could be so successfully carried out was a most impressive proof of the Assyrian strength, a proof not to be again given until the last monarch of the name of Tiglath-Pileser should ascend the throne three and a half centuries later and then perhaps in direct imitation of his older namesake.²¹ To the same period must be attributed the expedition which was made against Millidia, located in Hani-Galbat. The city itself was not taken, for its ruler came out to embrace the conqueror's feet and Tiglath-Pileser was satisfied with a yearly tribute of one homer of a mineral which seems to have been magnesite.²²

So long continued an expedition must have caused a great strain on the Assyrian resources and we are not surprised to find that the fifth year has little of war to report. The booty brought back home was utilized in completing the new temple of Anu and Adad which was dedicated in June of this year.²³ Not until winter was a new campaign undertaken and then it was against the Ahlame, the Aramaeans in the steppe south of Harran, who

Kirini may be the Kureni north-east of Dohuk, Layard, *Niniveh*, I. 192, and connected with the Armenian province of Karin. The mountains on the way to Nairi are Elama, Amadana, Elhish, Sherabell, Tarhuna, Tarkabulli, Kiera, Tarhanabe, Elula, Hashtare, Shahishara, Ubara, Miliadruni, Shulianzi, Nuhunash, Shesha.

²⁰ Lehmann, *Verh. Berl. Anthr. Ges.* 1898, p. 574; *Sb. Berl. Akad.* 1900, p. 627.

²¹ Broken Ob. 2 gives campaigns for this year which cannot be connected with any given in the Annals. The 'four thousand' of 1. 2 cannot be connected with the same number of the Kaski, as in Budge-King, *Assyria*, I. 132, n., for that belongs to an earlier expedition. Perhaps the campaign in July against Mush[ki] is the same as ours against Millidia.

²² Cf. Berthet, *Comptes Rendus*, 1897, 472. Whether we identify Millidia with Melitene-Malatia depends on whether we believe Hani-Galbat extended so far north.

²³ Eponymy of Ashur Ob. 2. 13 ff.

were clearly the aggressors.²⁴ From Suhî, which seems to have been on the Habur river, and the land of Harkî, he raided in one day, or so he says, to Carchemish in Hatti-land. The fugitives fled across the Euphrates, and Tiglath-Pileser pursued them on the same sort of rafts laid upon inflated skins that are used by the natives to-day. Six of their cities at the foot of Mount Beshri were taken and plundered, but, after all, this was a mere raid and had no effect in stopping the constant infiltration. Soon the Aramean question was to become the most serious the Assyrian government had to face.²⁵

To the same time and place, we must ascribe the well-known hunting exploits of our monarch. In the region of Harran and of the Habur, he slaughtered ten mighty male elephants and took alive four. When we compare this with the one hundred and twenty that Thutmoses hunted in this same section,²⁶ we may argue that the number of elephants had decreased in the inter-

²⁴ Tigl. 2.4 & 91, cf. Schiffer, *Aramäer*, 122, would correct the ethnic of the 'false prophet' Shemayah of Jer. 29. 24, 31, from Nehalemite to Ahlemite. The change from Nun to Aleph is not difficult and the Greek Allameites or Elamites might seem confirmation. But the Elamite of the original 'Septuagint' of the Jeroboam story shows that we have here an En-Halom, a 'well of oracular dreams,' with which was connected a family of seers, including the Shemayahs who opposed Solomon and Jeremiah certainly, the one who opposed Nehemiah probably, and to the same Levitical family seem also to have belonged high officials who escorted the ark with David, assisted Jehoashaphat with his legal reforms, and took part in the revivals under Hezekiah and Josiah.

²⁵ Ann. 5. 44 ff.; Obi. 2. 19 ff.—The location of the Suhî is fixed at the lower Khabur by Ashur-nasir-apal, Ann. 2. 100 ff.; 3. 17. The identification with the Shuhî of Job 2. 11 is due to G. Rawlinson, *Smith's Bible Dictionary*, s. v., cf. *Monarchies* 2. 66, n. 12. Curtis, *Chronicles*, 73, does not see how a 'district on the Euphrates near Haran' can be connected with the clearly Central Arabian Shuhî of Gen. 25. 2; 1 Chron. 1. 32. But we have an exact parallel in the modern Shammar and 'Aneze who actually occupy this region today, though Jebel Shammar and the city of Aneze are in Central Arabia. The Sohene of the Peutinger Table is probably an error for Sophrone and cannot be connected with Suhî. Harkî may be an error for Harran. For Ahlame, cf. Schiffer, *Aramäer*, 15 ff., and for Beshri, Olmstead, *AJSL* 33. 319.

²⁶ Amenemheb Biography, Breasted, *Records*, 2. 233; W. M. Müller, *Egyptological Researches* 1, pl. 35.

val—or that the earlier scribe was the less truthful. Killed, too, were four wild bulls in the desert of Mitani-land and in the city of Araxi, and it is no more remarkable to find these now extinct monsters than it is to observe Tiglath-Pileser casually remarking that he killed them with a spear of iron, for that metal was just coming into general use. After this, it is an anti-climax to tell of the one hundred and twenty lions killed on foot or the eight hundred from the chariot.²¹

The last campaigns given us by the annals date from the sixth year. Once more it was necessary to march against the northwest frontier and here we meet a new enemy, the men of the land of Musri, who occupied the land about the east branch of the Tigris.²² The king advanced between the mountains of Elamuni,

²¹ Ann. 6. 61 ff.; Obd. 4. 6.—Araxi, 'which is opposite Hattu-land,' is to be identified with the Eraxia of Ptol. 6. 4. 10, in the eparchy of Euphratensis; corrupt in Hierocles, 713; with the Eraxia of the Peutinger Table and the Eraxia of the Ravenna Geographer; Oragizon, a bishopric under Sergiopolis, in the Notitiae, Gelzer, *Byz. Zts.* 1. 249; cf. Müller, *Asien*, 284, 291; Sachau, *Reise*, 284, n. 1; Benzinger in Pauly-Wissowa, s. v. Nöhleke and Winckler, *Forach*, I. 87, doubt this identification and place it near Samosata, but without reason. As regards this Ahlamo campaign, Panerius, *Kriegsführung*, 64, writes, 'Eine solche radikale Plündering war nur möglich wenn das ganze Gebiet systematisch von einer grossen Zahl von Stieftkolonnen abgesucht wurde'—a true *reductio ad absurdum* of the whole column idea.

²² The first reference to Muari, Adad-nirari, *KTAA* 4, merely shows it northwest of Assyria, as it is mentioned after Shubari. Shalmaneser I mentions it after Urnabri (or Urarts) and Arina and before Hani, Taidi, Carebimish, Qutti, and Kutmuhi or Qummuh, *KTAA* 13. This would indicate its location in the region just west of the East Tigris, not far from Jezire, and the references by Tiglath-Pileser roughly agree. The Muari which Winckler, *Kämpfer*, 31, would find in Adad-nirari I, 1. 22, is merely the well-known phrase *muwipish muari* a budur, 'who enlarged boundary and frontier,' and the Muari of the Black Obelisk of Shalmaneser III is certainly Egypt, cf. W. M. Müller, *ZA* 1893, p. 200 ff. Whether our Muari is the same as the one of Sargon, Ann. 415, where Dur-Sharrukin is said to be 'at the foot of Mt. Muari, a mountain above Niniveh,' may be left an open question. This is clearly located to the long line of hills a bare hour north of Khorsabad which form the first outliers of the Jebel Maqîb or the hills east of Dohûk which are still inhabited by the Missouri Kurds, cf. Sayce, *EP* 1. 109, n. 7. We have absolutely no proof whatever for a Muari on the border of Syria and Asia Minor such as was assumed by Tiele, *Geach.* 201, n. 1, and which has played so large a part in Biblical commentary!

Tala, and Harusa, and ravaged the country. But Musri was not destined to be conquered, for it was a center of resistance later in the reign. This seems to have been due to the entrance upon the scene as allies of Musri of a new people, the Qumani, whose name is commemorated in the two sacred Comanas of Asia Minor. Siege was laid to the city of Arini at the foot of Mount Aisa, but this was abandoned when the inhabitants promised hostages and tribute. The Qumani were defeated in a battle on Mount Tala and were pursued as far as Mount Harusa which is over against Musri. One of their strongholds, Humusa by name, fortified by a triple wall of burnt brick, was taken and utterly destroyed. Salt was sown on the site and a chapel erected in which was placed a bronze thunderbolt and written on it the decree that the city should never be rebuilt. Next was besieged the royal city of Kibshuna. The king of the Qumani was now forced to submit and as punishment was ordered to destroy the great wall with its piers of burnt brick. The three hundred families which had supported the revolt were handed over to the tender mercies of the pro-Assyrian party and the tribute was increased.*

* Ann. 5. 67 ff.—Paneritius, *Kriegsführung*, 67, thinks that Musri was between the Tigris and the Euphrates because the Euphrates was not crossed. But this is shown to be incorrect by the identity of the names of places in Musri with those in Kirbi, proving that it is west of the Bitlis Chai. Mt. Elamuni is the Mt. Alaman in or near Kirbi, Ann. 4. 11, and perhaps, with Streck, ZA 13. 63, also the Mt. Elama of Ann. 4. 58. With Mt. Tela we must compare the city Tela of Kirbi, Ashur-nasir-apal, Ann. 1. 60. Mt. Asia equals Mt. Uso of the same passage. There is also here a Misrin in Arzanese, letter of Mar Aba, Chabot, *Int. Congr. Or.* 11. 4. 303, cf. 323. Harusa must be the Shikh Husin Dagh. With Kibshuna, Sayce, *PSBA* 23. 98, identifies the Qibea of Ramses II and the Kibatu of Sennacherib, Prism 3. 67. Arini is the Arina of Shalmaneser I, *KTIA* 13. 2. 6, between Urarta and Musri; the Aruni of Ashur-nasir-apal, Ann. 1. 47, in Tumme; the Arina, mentioned with the city of Batilaza, to whose king we have a letter, Thompson, *PSBA* 32. 191 ff.; the Arina before which Thutmosis defeated Naharin, Breasted, *Records*, 2. 207, and of the Hittite treaty, cf. Sayce, *PSBA* 23. 98, Luckenbill, *AJSL* 28. 162. Qumani was west of Musri, as Tabl. 2. 1. 13 adds 'Qumani up to Mt. Mehri.' Clearly the Musri campaign of Ob. 3. 4 cannot be the same, for the Ob. gives very brief recitals and there is at the very least a break of fifteen lines between col. 2 and col. 3. Note also how the 'twenty thousand fought with' in Ann. 5. 87, has become the twenty thousand 'added to my land' of the later Tabl. 2.

Here end our annalistic data and our exact chronology as well. Soon after the events just detailed, Tiglath-Pileser made a trip still farther to the west which had in it the elements of the spectacular. Crossing the Euphrates and establishing on its right bank the Assyrian settlement of Mutkinn, he swept across North Syria to the sea, first of Assyrian monarchs to behold the Mediterranean. The citizens of Arvad, secure on their island 'in the midst of the sea,' gave him a ride in their ships and assisted him in killing a whale. The king of Egypt, too, sent him a great crocodile which he proudly exhibited to his people. One desires to know what he sent in return and whether the Pharaoh followed his example in calling this gift a 'tribute.'¹²⁵

Not for long could Tiglath-Pileser enjoy himself on the blue Mediterranean. The Aramaeans were pouring like a flood across the Euphrates, and unless he beat a hurried retreat there was grave danger of his being cut off. The very same year, so it would seem, there was need of an attack on the city of Shašri and in July, in spite of the intense heat which reigned over the now barren steppe, the Assyrians were again forced to proceed against the Aramaeans. In May of the next year, we find Tiglath-Pileser attacking Pausa at the foot of Mount Kashiari, for the Aramaeans were by this time settled in the extreme north of Mesopotamia under the first ridge of the mountains. The same month, we have an attempt against the 'entrance of Nabula,' a pass not far from Amedi, and in the next we find the Assyrian armies attacking Aramaeans settled in a city on the Tigris. In August, advance was necessary to save the cities in the province of Shinamu, now held by the Assyrian Lishur-sala-Ashur. In September, the Assyrians were fighting the Aramaeans in the city of Mararrir in Shupre-land, that is, in the country directly under the main Armenian range. In November, there is reported an Assyrian raid from the land of Mahiriani to the city of Shuppa which is in the land of Harran.

¹²⁵ *Ob. 4. 3 ff.; Scheil Tablet, ET 22. 157.*—For Mutkinn, cf. Shalmacezer III, Mon. 2. 37. Translation of animal names still uncertain, cf. Hommel, *Gesch.* 532 ff.; Haupt, *OLZ* 1907, p. 253; *AJSL* 23. 253 ff.; Meissner, *Alte Orient.* 13. 2. 16; Budge-King, *Annals*, I, p. lxxi; Boscawen, *TSBA* 7. 335, thinks the second sculpture at Nahr-al-Kebir belongs to Tiglath-Pileser.

So Harran was already lost to the Aramaeans and with it, no doubt, the whole Mesopotamian country. At any rate, the road to the Mediterranean was effectively closed. In December we find three armies in the field, carrying on three separate campaigns, against Makrisi in Mount Iari, against Dur-Katliu, and against the Sangarite region on the Euphrates.²¹

But the tale of this year of many campaigns is not yet complete. Already in midwinter there had been another attack on Musri which had ended in the deportation of the inhabitants in June. Two months later, the men of Shura in Hani Galbat were likewise deported, and in the same month we have recorded the conquest of an unknown fortress in Kashiari and of Erisha which the Kirhu people had fortified.²² It was inevitable that

²¹ Obl. 3. 1 ff.—Pausa is compared by Schiffer, *Aramäer*, 147, n. 3, with the Pausa of the letters, II. 138 f., under the governor of Tushhan, and with Pau[za] of Tukulti-Ninib, Ann. I. 11 f. Nabula, Adad-nirari, KTA 5. 10, not far from Kashiari, revolted under Shaamaki-Adad, I. 47. The Tigris city is . . . tibna. Murarrir, badly damaged here, is proved by the Marira of Nirbu, Ashur-nasir-apal, Ann. I. 111. Mahirani is the Mehranu of Esarhaddon, Prism A. 2. 25; the Mehri of Tukulti-Ninib I, I. 11, cf. Peiser, *OLZ* 8. 57; of Tiglath-Pileser I, Tabl. 2. 1. 13; of Ashurnasir-apal, Ann. 3. 91; the name is preserved in the Mehrani castle above Fis, Taylor, *JEGS* 35, 40, cf. also Mehranu south of Attâkh and Muhri south of Haini. Makrisi is the Magarisi of Tukulti-Ninib, 2. 30; of Ashurnasir-apal, Ann. 3. 3, cf. Streck, *ZA* 18. 190; the Makrisi of the Harran Census, Johns, *Doomsday Book*, 2. 2. 13. Its location is thus fixed to the junction of the Jaghjâha and Khabûr, not far from Tell Kaukab. This position is still further confirmed by the location of the Magrus of the Peutinger Table and the Ravenna Geographer, 2. 13, cf. Sachau, *ZA* 12. 44, n. 1. For Iauri, conquered by Arik-den-Ilu, see Adad-nirari, KTA 3. 1. 22; still in Kirhu in time of Sargon, II. 173. For Sangarite on west bank of Euphrates, cf. Pitru 'which is on the river Sagura which is on that side of the Euphrates,' Shalmaneser III, Mon. 2. 36. Dur-Katliu in Laqe, Tukulti-Ninib, 2. 15; Ashur-nasir-apal, Ann. 3. 6.

²² Obl. 3. 4 ff.; cf. Schiffer, *Aramäer*, 8 ff.; 158 ff.—Col. 2 of Obl. deals with years 4 and 5. Then comes a break of at least 19 lines. In this break were the events of year 6 at least. The first campaign of col. 3 must be at least in year 7 and the great year of campaigns, in the oponymy of Ashur-ru'um-nisheshu, would be year 8 or later.—The city taken in the Musri raid was Tur...ia. (Schiffer, *Aramäer*, 8, prefers 'Tur... in the land of Musri.') Budge-King make one sign to be wanting before Shura, but the completeness of the reading is proved by the Shura of Hani-Galbat which Ashur-nasir-apal, Kurkh, 2. 53, conquered on his return

so strenuous a year should be followed by one of exhaustion, and indeed the Assyrians did not take the field until November and then only to chastise once more the Aramaeans. But it was a losing fight, as the official records themselves show, and to this Aramaean invasion, more than to any other one cause, must we ascribe the downfall of this first Assyrian empire.

Not alone in the steppe were there tribal movements which marked danger to the Assyrian power. On the northwest frontier, there were wars of the same sort with Lalume, with Kirhu, with the city of Gulguli in the region of Mount Ham, and to the same period belong other wars with Matqia, Andaria, and Adaupash, for of these campaigns we learn from a tablet which must be placed not far from the tenth year.⁶²

from Damdamusa. In the Kashiari campaign, the scribe took *halan* as a proper name and in this he is followed by Streck, *ZA* 18, 189, who compares Hal-*laka*, but in both cases we have simply the word for 'fort.'

⁶²Tablet 4.—Andaria may be the Anuria of Sargon, Ann. 87, and the Andiratum of the Ravenna Geographer, 2, 9, with Streck, *ZA* 18, 184; Panly-Wissowa, s. v. It is assumed in this study that what are usually differentiated as *Qurje* and *Kirhi* are identical. No objection can be found in the difference of the initial letters as the Assyrian was notoriously weak in distinguishing *q* and *k* and he also had the usual Semitic indifference to short vowels. The lengthening of the first by an added *-e* or *-i* proves nothing, as this is often added, even when the *i* is clearly the sign of the genitive. Identity is conceded from the non-Assyriologist by the fact that editors have read the first *Qur-je* and the second *Kir-hi*, though the second sign is the same in both and the common value is *hi*. The form *Qurhi* is found in the records of Tukulti-Ninib and Tiglath-Pileser, *Kirhi* in the later inscriptions. The exception proves the rule. In the Annals of Tiglath-Pileser, 4, 8 ff., we read 'I marched against the land of Sugi which is in the land of Kirhi I fought with the lands of Hime, etc. . . . and all the extensive *Qurhi*.' The cities of the tablet clearly belong to *Kirhi*. Matqiu is the Mitqia of *Kirhi*, Ashur-nasir-apal, Ann. 1, 60, cf. Streck *ZA* 18, 183, and the Motki west of Bitlis, Belek, *ZDMG* 51, 561; Saga is the Sugi of *Kirhi* of our own Annals, 4, 8; Saquma is the same word with the common ending *ma*, cf. especially the numerous cases of *Ashur-lani-apal*, Rassam Cyl. 5, 43 ff.; Nisht[un] is in *Ashur-nasir-apal*, Ann. 1, 62; Shuria is the Shura of Obl. 3, 15 and of *Ashur-nasir-apal*, Mon. 2, 8; Na[la] is the Nala at whose foot was *Kirhi*, Tiglath-Pileser IV, 2, 41; Hirdi of *Kir(hi)* may be theirdi of *Qa[rhi]* with which Tabl. 4 begins. Other cities mentioned here are Sudrin, Arruhundu, Inishti, Iusa, Hirsiihtu. That these belong to *Kirhi* was seen by Winckler, *OLZ* 1, 105. Rawlinson, Mon. 2, 84, had already compared the modern Kurkh, the site of the later provincial capital of Tushhan.

Already in the third year of his reign, Tiglath-Pileser suffered a severe loss, of prestige even more than of territory, when the Babylonian Marduk-nadin-abu fell upon an Assyrian city by the name of Ekallate or the 'Palaces,' and carried away the gods Adad and Shula (1107 B. C.).²⁴ Yet in spite of this loss, we find Tiglath-Pileser in the very next year giving himself the title 'King of the Four World Regions,' which should mean that he held at least a small part of North Babylonia. Whatever his possessions—in the fifth year he can boast only the Lower Zab for his boundary—it is still his boundary in the tenth, and when, somewhat later, he begins his invasion of Babylonia, it is again at the crossing of the Lower Zab that he makes his first conquests.²⁵

Marduk-nadin-abu, then, had sufficient time to consolidate his possessions in the debatable land. We have the hint of some sort of internal organization when we find him granting to his faithful servant Adad-zer-iqisha a plot of land in return for the aid which he had given in the first battle.²⁶ Yet when Tiglath-Pileser turned from the bootless wars with the Aramaeans to seek an easier and a more profitable victory, the Babylonians were not ready. In the first year's campaign, we hear of a skirmish between the chariotry of the contending parties above the city of the Lower Zabon opposite the city of Arzuhina.²⁷ Victory declared for the Assyrians and in the following year their king anticipated the terrible summer heat by leaving Aashur in February and marched down the west bank of the Tigris. No resistance was met until the army arrived at Marriti on the border of Akkad, when a battle was fought, the cities of the Dur Kurigalzu region²⁸ were captured, and their governor Kadashman-Buriash made prisoner. The advance continued southward, taking over Dur-Kurigalzu itself, the Sippars of the god

²⁴ For the year 3, cf. OBI. 1. 16; Sennacherib, Bavian 48 ff., dates the event 418 years before the taking of Babylon, which gives 1107 B. C. In the list 2 R. 60, 10, Ekallati comes immediately after Susa.

²⁵ Tabl. 1; Ann. 6. 40; Tabl. 5; Synchr. Hist. 2. 31.

²⁶ 3 R. 43.

²⁷ Arzuhina, later a most important provincial capital, must be placed at the huge Gök Tepe south of Altyn Köprü, on the basis of the present passage.

²⁸ Named . . . indishnla and . . . sande.

Shamash and the goddess Annunitum, Babylon, and Upe. Here was stayed the advance but in the meantime another army had been ravaging the region which extended from the city of Akarsallu to Lupdi, and the Suhî land as far to the northwest as Rapihi on the Euphrates was brought under Assyrian control. Such conquests need no interpretation. All the Babylonian possessions north of the alluvium and practically all the cities of North Babylonia had felt the hand of the invader. Babylon itself might hope soon to be freed, but its imperial position was gone forever. It is not a far conjecture that this defeat resulted also in the deposition of Marduk-nadin-she and in the accession of Marduk-shapik-zer-mati.²⁰

Rarely do the Assyrian kings allow us any insight into their internal affairs, and Tiglath-Pileser is no exception. Of his buildings alone do we hear, but we can learn something from even this. On his own admission, the decline in Assyrian power under his fathers had brought about decay and desertion. There was much work needed to restore palaces and many of the cities were no longer protected from the nomad enemy by their ruined town walls. The first building taken in hand was the 'Palace of the King of the Four World Regions' which was completed in the fourth year and the great temple of Anu and Adad, whose description fills so great a space in the Annals, followed soon after. The treasure house of Adad was rebuilt, and so were the temples of Amurru, of the elder Bel, and of Ishtar of Assyria.²¹ Nor was Tiglath-Pileser without due care for the welfare of his country, if we are to believe his own words. The water-wheels in all Assyria were repaired, and there was a resultant increase in taxes paid in kind. The captured horses, cattle, and asses were collected together, and the deer, stags, ibexes and wild goats, which he had taken in the chase, were

²⁰ The account here given is based on a combination of Syncrh. Hist. 2, 30 ff. and Obl. 3, 4 ff. We may also see a reference to these events in the chronicle given by King, *Chron.* 2, 57 ff., 'heavy [booty] he captured,' cf. further Olmstead, *Amer. Jour. Theology*, 20, 250 ff. The *kudurru* 8 R. 43, mentioning the Babylonian victory, is dated in year 10, which is year 3 of Tiglath-Pileser. A war not earlier than year 10 of the Assyrian ruler would bring it to year 17 of Marduk-nadin-she. His year 13 is the last known.

²¹ Ann. 6, 94 ff.; Obl. 2, 13; Tabl. 4.

reared for sacrifices. Cedars and other trees, together with all sorts of garden truck, were carried away and planted in the gardens of Assyria. The picture is idyllic.

In summing up his reign, Tiglath-Pileser boasts: 'I have made good the condition of my people; in peaceful habitations have I made them to dwell.' It is the irony of fate that to us Tiglath-Pileser is known almost exclusively by his conquests, while the later history was to show that war and decline were the destined lot of his people.

ON THE NATURALISTIC BACKGROUND OF THE
'FROG-HYMN,' RIG-VEDA 7. 103

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The so-called 'frog-hymn,' RV. 7. 103, has been frequently and variously discussed, but since Professor Bloomfield's article in *JAOS* 17. 173 ff. there has been no reason to doubt that it is a serious, practical, sacerdotal rain-charm.¹ It may be possible, however, to add a point or two by way of corroboration of Bloomfield's view, and by way of exegesis of the hymn itself.

The relationship between the frogs of the hymn and the frogs of nature has been rather vaguely assumed, but nowhere sufficiently insisted upon. For example, altho it is of course taken for granted, no Vedist, so far as I am aware, has made even the definite statement that in India the frogs actually do croak at the beginning of the rainy season. But there is somewhat more of a zoogeographical background to the hymn, and incidentally more evidence for the rain-charm theory, than appears in Macdonell's statement (*History of Sanskrit Literature*, p. 121) that 'the awakening of the frogs at the beginning of the rainy season is here described with a graphic power which will doubt-

¹ The chief argument against this view and in behalf of the once widely held, but now obsolete interpretation of the hymn as a satire on the Brahmins has been based upon the conception that the frog is a grotesque and even repulsive animal. But to many people and peoples he is very far from being either. The respectful comparison of Brahmins with frogs is no more violent than the assignation by the Greeks of the little horned owl of southern Europe to Pallas Athena as an emblem of her wisdom. Notice, e. g., *Brahms Tierleben*, 4. 233: '[Flower] erzählt, dass während der Regenzeit, als jeden Abend Schwärme von Insekten, vom Lichte angezogen, ins Haus kamen und zur Essenszeit sehr Hastig wurden, ein oder zwei solcher Frösche [Indian bullfrogs] auf den Esstisch gesetzt wurden. Sie schienen zu verstehen, was von Ihnen verlangt wurde, denn anstatt wegspringen oder sich vor den Gästen oder Dienstern beunruhigen zu lassen, fingen und verzehrten sie die fliegenden Insekten sacheinander, wenn diese auf dem Tisch landeten.' See also Waddell, 'Frog-worship' (in *Nepal*), *Indian Antiquary*, 22. 293 ff.

less be appreciated best by those who have lived in India'; or than appears in the key-note of Bloomfield's article (p. 178): 'The frog in his character of water-animal par excellence quenches fire, produces water where previously there was none, is the proper repository for fever, and finally is associated with the annual appearance of rain in the rainy season.'

It is an almost universal superstition, if not a fact, that the croaking of frogs is a sign of rain. It is well established that the tree-frog, 'the prophet of the summer showers,' is apt to croak when the barometer is low and rain is impending. It is quite possible that the more aquatic species do likewise. An army captain tells of their suddenly appearing at the first sign of rain and croaking by the thousands on the sandy drilling grounds of a fort in Arizona. This frequently occurs after months of drouth and of silence on the part of the frogs. If the Vedic Indians observed that the coming of the rains was preceded by the croaking of frogs, or even if the croaking and the rain were simultaneous, it would have been natural, yea inevitable, for them to conclude that the frogs were responsible for the breaking of the rains. There is, in fact, more than a bit of native evidence that the Hindus viewed the frogs as 'rain-callers.'

In America, as in Europe and temperate latitudes in general, frogs hibernate in winter. In India, as in other tropical countries, they estivate during the dry season, i. e. they bury themselves deep in the sand or soil and silently await the coming of the rains. They emerge by the thousands from their places of estivation at the beginning of the rainy season; they breed when they thus emerge in the tropical spring from their retreats; they croak chiefly during the breeding period, the croak being the sexual cry of the male. When a large number of individuals join in the performance, as is usually the case, the concert at the beginning of the rains is simply deafening and is audible miles away.² Thus, in a very real sense, the croaking of the frogs

² Cf. in general *Brehms Tierleben*, 4th ed., edited by Otto von Strassen, Leipzig and Wien, 1911-1915, vol. 4: *Die Lurche und Eidechsen* von Alfred Brehm, neubearbeitet von Franz Werner, 1912; *Cambridge Natural History*, vol. 8: *Amphibia and Reptiles* by H. Gadow; Mary C. Dickerson, *The Frog Book*, New York, 1913; E. G. Boulenger, *Reptiles and Batrachians*, New

ushers in the Indian rainy season, and by an easy *causa causata* is considered responsible for it.

The texts make it plain that the croaking of the frogs is preceded by a period of silence. In the *Harivamśa*, *Viṣṇuparvan* 95. 23 = 8803, the frogs croak after having slept eight months. In RV. 7. 103. 1, 8, and 9 the frogs raise their voices after having lain silent for twelve months. The silence of the frogs is, of course, that of estivation. The longer period would count from the first appearance of the frogs in one year to their first appearance in the next year, or from the beginning of one rainy season to the beginning of the following one. The shorter period would reckon from the end of the rains one year to their beginning in the next year. In the Panjab the rainy season lasts four months—June, July, August, and September.

In many cases when the texts especially designate the sex of the frog, it is the female (*mandūki*, *mandūkikō*) that croaks (cf. AV. 4. 15. 14, and Bloomfield, p. 179 and note). Biologically, however, the female frog has little or no voice and only the male croaks. But as frogs have no external organs of copulation, the Hindus could not have distinguished male and female. Even a frog itself cannot determine by sight the sex of another. At the breeding period a male frog approaches another frog and embraces it; if the latter croaks it is recognized as a male and is released. Doubtless this breeding is described in our hymn: '[Stanza 3] When, the rainy season having arrived, it has rained upon them longing and thirsting, then crying *akhkhala*, as a son to his father one approaches the other (who is) croaking.² [Stanza 4] One of them seizes the other when they have both delighted in the pouring forth of the waters³; when the

York, 1914; *Encyclopædia Britannica*, s. v. *Batrachia*, *Hibernation*. See also G. A. Boulenger, *The Tailless Batrachians of Europe* (in publications of the Bay Society), 1897-8, vol. 1, especially p. 62 ff.; E. Massat, 'Les Cris des Batraciens,' *Cosmos*, Paris, 1911, vol. 64; J. Gai, 'Chant de la Rainette,' *Bull. Soc. Étud. Sc. Nat.*, Nîmes, vol. 35.

² The seer should not be blamed for failing to observe that it is only the approaching (male) frog that is croaking; it is admittedly difficult to detect a frog in the act of croaking.

³ The sexual 'seizing' lasts often for hours and even days and would certainly be noticed frequently by the rishi-naturalist.

frog sprinkled by the rain hopped about,³ the speckled joins voice with the green.' Here we have together and in proper sequence the beginning of the rains, the croaking, and the breeding—in the hymn as in nature.

The emphatic distinction in stanzas 4, 6, and 10 between the speckled and the green frogs attracts attention. This classification of frogs into two kinds, the speckled and the green, apparently goes by parallel straight thru the hymn. The one approaches the other, *anyó anyám* (stanza 3); the one seizes the other, *anyó anyám* (stanza 4); both kinds rejoice in the waters (4); the speckled joins voice with the green (4); the one repeats the cry of the other, *anyó anyásya* (5)^{4a}; the one bellows like an ox, the other bleats like a goat (6 and 10); the one is speckled, the other is green (6 and 10). In stanzas 4 and 10 dual verbs are used—with subjects in the sense of 'both kinds, the speckled and the green.' It is more than possible that the colorings were considered an indication of sex. If the parallel holds, and it seems to hold perfectly, the male frog, speckled and deep-voiced, approached, seized, and bred with the female, who was green and had less voice.⁴

It is quite certain, however, that in the hymn different genera are indicated, either consciously or unconsciously—and in the case of the speckled frog, possibly a definite species. According to Brehm, the frogs and toads of India are *Ranidae* (true frogs and flying frogs), *Engystomatidae* (small-mouthed frogs), and *Pelobatidae* (toad frogs). To the second of these families belongs the numerous, wide-spread, large, brown-yellow-black-red-gray-speckled Indian Bullfrog, *Callula pulchra* Gray, whose voice resembles the bellow of an ox.⁵ Twice in the hymn we

³ *kániśkan*: frequentative rather than intensive. Bloomfield, 'did skip.'

^{4a} Despite Wackernagel, *Altindische Grammatik*, 2. 1. 322 (cf. also Brugmann, *Grundriss*, 2. 1. 95), I am unable to see any indication, either in forms, accent, syntax, or context, of reciprocal action in stanzas 3, 4, or 5.

⁵ That there was, at least later, a consciousness of the sex-element in the hymn is suggested by Harivansha, *Vishnuparvan* 95, 23 = 8803, 'a passage which is clearly modelled after stanza 7 ff. of our hymn . . . : "The frog having lain asleep eight months croaks with his wives." ' (Bloomfield, p. 178).

⁵ It inhabits the Indian mainland from Ceylon to China, and is known and distinguished everywhere for its variegated coloring and for its remarkably

find, if not the direct statement, at least the clear indication by parallel that the speckled frog has a deep voice and bellows like an ox, and that the green frog bleats like a goat, i. e. has less voice: 'One bellows like an ox (*gómāyur īka*), the other bleats like a goat; one of them is speckled, the other is green' (stanza 6); 'The one that bellows like an ox, the one that bleats like a goat; the speckled one and the green one have both given us wealth' (stanza 10). In *Kānsika* 93. 4 and 96. 1 and 3 *gómāyu* above is used outright as a name for a particular kind of frog—quite possibly the Indian bullfrog. There are various species in India of green (or, for that matter, yellow or greenish-yellow) frogs that 'bleat like a goat,' that have less voice: 'bearing a common name, but of different color-and-shape, they modulate their voice in various ways when they speak' (stanza 6).

That the hymn is on the whole hieratic cannot be denied, and one must agree, rather regretfully, to be sure, with Bloomfield (p. 176) in rejecting the picture of a 'mildly frenzied rhapsodist among the people, or, perhaps, . . . some Rāja's poet laureate "given to infinite tobacco" [to keep away the mosquitoes!], as he walks along the jungle in the cool of the evening, at the opening of the rainy season, eager to bag some good subject for the delectation of the court of his patron.' But even if the

loud voice. For a full description of its habitat, markings, habits, and voice see Brehm, I. c., p. 281 ff. Notice p. 233: 'Später macht Flower auf Grund seiner Beobachtungen in Siam noch weitere Mitteilungen über den Indischen Ochsenfrosch . . . Während der Regenzeit in Bangkok ist fast jeden Abend nach einem regnerischen Tage die Luft voll von dem dröhrenden Gequaken dieser Frösche, das wie "eung-ahng eung-ahng" klingt und, bald fallend, bald ansteigend, die ganze Nacht fortgesetzt wird. [Cf. stanza 7 of the hymn: 'Like Brahmans at the all-night soma-sacrifice, chanting around the full soma-bowl (pool).'] An manchen Straßen, die beiderseits von Wasser begrenzt sind, und wo Callula häufig ist, kann man buchstäblich seine eigene Stimme nicht hören.'

The voice of the Indian bullfrog is elsewhere described by Flower as 'wan-ahhhhh.' With *akkhala* in stanza 3, above, Bloomfield (p. 174, note) compares *speccccck* *coo*² *coo*². But according to G. A. Boulinger (above, p. 63) the cry of Aristophanes' chorus of frogs is that of *Rana esculenta*, which is not a speckled, but a green frog. I grant, however, that little weight can be put on efforts accurately to describe the voice of frogs. Probably no two modern observers would agree entirely upon a phonetic transcription of the voice of any species.

ecclesiastical 'Stimmungsbrechung' at the end was, as seems likely, the production of the author of the remainder of the hymn, I submit, nevertheless, that the rishi was not so absorbed in the prospects of bakhshish that he could not afford the time to observe with patient care the frogs at their play and to describe with genuine interest and enthusiasm what he saw. Notice, in addition to what has already been said, stanza 5 of our hymn: 'When one of them repeats the cry of the other, as a student (that) of the teacher, then all that with them is like a well-executed* lesson, when with a loud voice they croak upon the water.' One croaks in one direction, another croaks in another direction; then a whole chorus arises as if a great group of students were repeating the words of the teacher. Any one who has observed frogs will recognize this as an accurate and vivid description.

Finally, to Bloomfield's evidence of the use of the frog in rain-charms may be added a point from the report of ritual uses in Lanman's edition of Whitney's translation of the Atharva-Veda. AV. 3. 13 is addressed directly to the waters and is prescribed in whole or in part for four different purposes: to be used with a frog in a ceremony for directing water into a certain course (Kāuśika 40. 1 ff.); to accompany the conducting, in the *agnicayana*, of water, reeds, and a frog over the altar-site (Vātāna 29. 13); to be used by one desiring rain (Commentary); to be employed in a rite for good fortune (Kāuśika 41. 14). Here we have in the native employment of one hymn all the elements of frog-ritualism except its use as a cure for fever.

* Cf. Bloomfield, p. 174 and note.

THE VIGESIMAL AND DECIMAL SYSTEMS IN THE
AINU NUMERALS

WITH SOME REMARKS ON AINU PHONOLOGY

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The vigesimal character of the numeral system of the Ainu was first recognized clearly by the great philologist A. F. Pott,¹ although he had at his disposal only the scanty and deficient vocabularies of A. J. v. Krusenstern² and Klaproth (*Asia polyglotta*). On the basis of a Japanese collection of Ainu words, the *Moshiogusa*, A. Pfizmaier³ arrived at the same conclusion a few years later. J. Batchelor,⁴ the patient and meritorious investigator of the Yezo Ainu, has refrained from giving an analysis of the numerals, being content to observe that 'twenty, more literally a "score,"' is the highest unit ever present to the Ainu mind when counting. Thus, forty is "two score," sixty is "three score," eighty is "four score," and a hundred is "five score."⁵ An interesting analysis of the numerals from the pen of B. H. Chamberlain, however, is inserted in his Grammar.

The cardinal numerals from one to five are *šine*, *tu*, *re*, *ine*, and *asikne*; or properly, -ne being a suffix, as will presently be recognized,⁶ they are *ši*, *tu*, *re*, *i*, *osik*. The word for the number 5, *asik*, is doubtless associated with the nouns, Yezo *asike*, from **asike* 'hand', *asikororo* 'a handful', *asikipet*, Saghalin *askipit*

¹ *Die quinare und vigesimale Zählmethode bei Völkern aller Welttheile*, p. 85 (Halle, 1847).

² *Wörterzammlungen aus den Sprachen einiger Völker des östlichen Asiens* (St. Petersburg, 1813).

³ 'Untersuchungen über den Bau der Aino-Sprache,' p. 26 (*Sb. Wiener Akad.* 1851). In 1863 Pfizmaier adopted the only correct spelling 'Ainu' (see his 'Untersuchungen über Aino-Gegenstände,' p. 1).

⁴ *A Grammar of the Aino Language*, p. 47 ff. (Yokohama, 1903); reprinted also at the end of his *Aino-English-Japanese Dictionary* (2d ed., Tokyo, 1905).

⁵ The same suffix is employed also in adjectives: *kurus-ne* 'black', *on-ne* 'old', *tan-ne* 'long', *tak-ne* 'short'.

'finger'.* The designation for 'foot' (*kema*) is not met with in the numeral system.

The numbers six to nine are formed by subtraction from 10, *wan*,† as follows:—

ivwan, *i-won* (*i* 4, *wan* 10), $10 - 4 = 6$.

arauwan, *a-ro-wan** (*a* prefix, *ra* = *re* 3, *wan* 10), $10 - 3 = 7$.

tupeswan, *tu-pe-san* (*tu* 2, *pe* 'thing,' *san* 10), $10 - 2 = 8$.

haepeswan, *hi-ne-pe-san* (*hi* 1, *ne* suffix, *pe* 'thing,' *san* 10), $10 - 1 = 9$.*

* This seems to me the only rational explanation in opposition to B. H. Chamberlain (*The Language, Mythology, . . . of Japan Viewed in the Light of Ainu Studies*, p. 9), who interprets *asik-no* as 'possibly "new four"' (*asiri* *ne*). This is artificial and runs counter to phonetic requirements. Pott (l.c.) had already remarked that the relationship of the numeral 5 to 4 in the sense of 'a beyond it' is merely deceptive.

Batchelor writes *wo(n)*. On Saghalin I heard only *wan* or in composition with *pe* 'thing': *wam-pe*. I. Radliński ('*Slownik narwiecek Ainów*', p. 67, Kraków, 1891) gives for the Kuril dialect *wam-pi-y* or *wam-pi-kasma*. The materials of this Polish author have not been utilized by Batchelor.

* On Saghalia only *a-ru-wan*. Batchelor (*Dictionary*, p. 44) gives for Yesso both *arauwan* and *arauwon* on equal footing; the Moshiogura, according to Pfleiderer, only *arauwon*. Kuril Ainu (Radliński) area (from **arawa*).

* Chamberlain (l.c.) analyses *tupeswan* as 'two (*tu*) things (*pe*) come down (*san*) [from ten];' and similarly *haepeswan*. True it is, Batchelor has on record a word *san* with the meaning 'to descend, to flow along as a river, to go down'; but there is nothing to indicate that it conveys the notion of subtraction. I prefer to assume that *san* in the numbers 8 and 9 appears in lieu of *wan*, and signifies 'ten.' The question, however, is not of a phonetic change, as alternation of *s* and *w* being otherwise unknown in Ainu, but we are bound to suppose that *san* is an independent stem or base with the meaning 'ten' on a par with *wan*. Also the languages of primitive tribes are no longer extant in their original forms, and especially in the numerals far-going modifications and re-adjustments of various systems have doubtless taken place. In Friedrich Müller's *Grundriss der Sprachwissenschaft* (2. I. 145), where a rather poor and in many respects incorrect sketch of Ainu is given, we read literally as follows: '8 *tu-be-san* (2 + 5); 9 *tae-be-san* (1 + 8).' The element *san* cannot be compared with the numeral 5 *asik*, *asik-no*, for, as is evidenced by the word for 'finger,' from which the numeral is derived, the final *k* is part of the stem. Moreover, if we are not mistaken, even in Müller's time (1882) 2 + 5 was 7, and not 8, as he makes out. To be consistent, Müller should have explained *tae-be-san* 9 as 1 + 5, but it will not do to conceive the element *be-san* as 8. Pott had already recognized the true condition of affairs, saying that the numbers from 6 to 9 raise the suspicion of having originated retrospectively through deduction from 10, and that there is no doubt of this in 8 and 9. Even Ph. van Siebold (*Nippon*, new ed., 2. 255) gave a correct explanation of the Ainu number 8. The first edition of his work, incomplete, appeared in seven parts in Leiden, 1832-52.

The numbers eleven to nineteen are formed on the scheme $1 + 10$, $2 + 10$, *kiñe ikasima wan*; on Saghalin simply *kiña ikasima* = $1+$. The unit of all higher counting is represented by the figure 20: Yezo *hot-ne* (the same suffix *-ne* as in the numbers 1, 4, 5, and possibly the mobile *-n* of *wan* 10), Kuril *ot*, Saghalin *ox*, *otsi*. The number 30 is expressed by $10 - 2 \times 20$ ¹⁰ (*wan-e-tu-hot-ne*), 31 by $1 + (10 - 2 \times 20)$, $40 = 2 \times 20$, $50 = 10 - 3 \times 20$, $60 = 3 \times 20$, $70 = 10 - 4 \times 20$, $80 = 4 \times 20$, $90 = 10 - 5 \times 20$, $100 = 5 \times 20$ (*asikne hotne*, Kuril *askinot*), $110 = 10 - 6 \times 20$, $120 = 6 \times 20$, $200 = 10 \times 20$, $1000 = 5 \times 10 \times 20$, etc.

In its origin, this numeral system accordingly was quaternary, the numbers one to four being indivisible and undefinable roots. The number five was derived from the designation of the hand. It plays no role in the formation of higher number-conceptions. The words for ten and twenty are simple and unanalyzable stems. From eleven to nineteen the numbers follow the decimal principle, while from twenty onward a vigesimal system is carried through with clear consistency. Similar conditions are found in American languages.¹¹

This method of reckoning is remarkable for its complexity, and bespeaks no small degree of mental effort for such simple folk as the Ainu. We are quite ready to believe Batchelor that in actual practice the higher numbers are rarely, if ever, met with, nor is it surprising to learn from the same authority that at the present time the simpler Japanese method (that is, a purely decimal system) is rapidly supplanting the cumbersome native system. Such transformations are always interesting to note and worth keeping in mind, especially in view of the conventional opinion that the life of primitives should be unchangeable.

It has not yet become known, however, that the Ainu of Saghalin, at least part of them, have advanced toward a purely decimal system of counting, but, while the impetus to this progressive movement was doubtless received from an outside quar-

¹⁰ To be understood, of course, as $(2 \times 20) - 10$.

¹¹ See chiefly the interesting study by R. B. Dixon and A. L. Kroeber, 'Numerical Systems of the Languages of California,' *American Anthropologist*, 9 (1907), p. 661-690; and J. A. Mason, 'Ethnology of the Salinan Indians,' *Univ. of Cal. Publ. in Am. Arch.* 10 (1912), p. 134-138.

ter, they have recruited elements of their own language to this end. Among the Ainu on the southeast coast of Saghalin Island, I recorded the numerals in January 1899 as follows:—

1 <i>hi-nä</i>	10 <i>wam-pe</i>	100 <i>hi-nä-tanku</i>
2 <i>ti</i>	20 <i>ti-kankutu</i>	200 <i>ti-tanku</i>
	21 <i>ti-kankutu hi-nä</i> <i>kaftina</i>	
3 <i>ri</i>	30 <i>ri-kankutu</i>	300 <i>ri-tanku</i>
4 <i>ts-e</i>	40 <i>ts-e-kankutu</i>	400 <i>ts-e-tanku</i>
5 <i>ai'k, aiz-ne</i>	50 <i>ai'k-ne-kankutu</i>	500 <i>ai'k-ne-tanku</i>
6 <i>i-wan, i-wam-pe</i>	60 <i>i-wan-kankutu</i>	600 <i>i-wan-tanku</i>
7 <i>a-ru-wam-pe</i>	70 <i>a-ru-wam-kankutu</i>	700 <i>a-ru-wam-tanku</i>
8 <i>ta-pe-sam-pe</i>	80 <i>ta-pe-sam-kankutu</i>	800 <i>ta-pe-sam-tanku</i>
9 <i>hi-nä pe-sam-pe</i>	90 <i>hi-nä pe-sam-kankutu</i>	900 <i>hi-nä pe-sam-tanku</i>
		1000 <i>wan-tanku</i>

It is clear that this system, based on the multiplication of 10, is logically decimal pure and simple. How far it is propagated among the Ainu of Saghalin I am unprepared to say, as my sojourn among them was limited to a few days, but it was given me by my Ainu informant as the mode of counting then generally in vogue. There is no doubt that also the ancient vigesimal system still holds sway on Saghalin, as stated by M. M. Dobrotvorski and B. Pilsulski. Dobrotvorski was stationed on Saghalin as Russian military surgeon from 1867-71, and his *Ainu-Russian Dictionary*²³ was published on his death by one of his brothers in Kazan, 1875. In the appendix of this work (p. 15), which contains a criticism of Pfizmaier's treatise cited above, the author speaks exclusively of the vigesimal character of the numerals. In the body of the dictionary, however (p. 153), he remarks that *kankutu* (thus spelled instead of *kankutu*) is a counting-word for sables with the meaning 'ten sables,' also *sne* (= *hi-nä*) *kankutu* being used in this sense; *ta-kankutu*, 'twenty sables,' etc. It is quite possible and, as will be noted, plausible that this method was originally inaugurated in connection with the calculation of sable-skins; but it is certain that *kankutu* does not mean 'sable,' either in Ainu or in any language of the peoples surrounding them. The sable is called by the Ainu both on Yezo and Saghalin only *hoinu* or *hoino*. Under

²³ By the way, a rather mediocre and from a phonetic viewpoint unsatisfactory work.

taiku Dobrotvorski (p. 317) notes that this signifies 'a hundred snares in catching sables.' *Taiku*, however, means simply 'hundred.'¹²

The word *taiku* for hundred occurs in an Ainu story recorded by B. Pišudski¹³ and describing an incident of Tungus life. It is avowedly the reproduction of an Orok tradition. With reference to *taiku* Pišudski remarks that this is not a word of the Ainu, who denotes hundred by *as̄isne hot* 'five score'; 'it is taken,' he continues, 'from the Olčey [read Olča] tribes, from whom they learned to set snares for pine-martens, and counted the number of snares by hundreds in that language.' Yet *taiku* is not peculiar to the Olča, but the common word for hundred in Manchu (*taŋgū*), in the ancient language of the Jučen (*taŋgu*), and among all Tungusian and Amur tribes. The Ainu were for two centuries under the rule of the Manchu, and my impression in the matter has always been that they adopted this numeral from their Manchu rulers. This conclusion is amply confirmed by the fact that the annual tribute to be paid to them by the Ainu, as was the case with all the tribes of the Amur region, consisted in sable-skins and other peltry. The Chinese classified all these peoples under the category 'those with an annual tribute of sable-skins' (*sui tsin fiao p'i*). The Ainu ranked in this class,

¹² Dobrotvorski (p. 228) notes also a word *opisye* with the meaning 'ten snares in the catch of sables,' used in the same manner as *baikutsu*. But *opisye* is very far from having in its origin this narrow significance. Eliminating the element *ye* 'thing,' we have *opis* which was recorded by Steller in the eighteenth century with the spelling *sp̄yha* as the numeral 10 among the Ainu at the southern end of Kamchatka (see his vocabulary published by J. Klaproth, *Asia polyglotta*, p. 302, or *Aperçu général des trois royaumes*, p. 234, Paris, 1832). Further, Batchelor has noted on Yezo a word *upiš* meaning 'number.' It is therefore probable that *upiš*, *opis*, or *opid*, assumed the significance of a high number, and was finally utilized to convey the notion 'ten.' What Dobrotvorski noted is merely a specific case or an applied example. For this reason I am inclined to infer also that the expression *baikutsu* at the outset had no relation to the business of sable-catching, but, whatever its primeval meaning may have been, is a genuine Ainu word denoting the numeral 10. On Yezo there is a similar word for ten, used only in the counting of animals, *otaitu*; for example, *tu otaitu* 'twenty animals'—sufficient evidence that the Ainu language does not lack expressions for ten.

¹³ *Materials for the Study of the Ainu Language and Folklore*, p. 139 (Publication of the Imperial Academy of Sciences, Cracow, 1912).

as stated in chapter 3 of the *Huang ts'ing chi kung t'u*, 'The Tribute-bearing Nations of the Manchu Dynasty,' an official work published under the reign of K'ien-lung in 1773. Here the Ainu are illustrated and described under the name *K'u-ye* (*Hou-ye* of the Jesuits of the eighteenth century), which is a reproduction of *Tungus Kūgi*, the Tungus and Gilyak designation of the Ainu.

As to Manchu-Ainu relations we are well informed also by Japanese authors. One of these, who wrote in 1786, mentions tobacco-pipes provided with inscriptions in Manchu characters and traded to Karafuto (Saghalin), also Chinese stuffs obtained by the Manchu in Peking and shipped thither.¹⁵ Above all, we have an excellent source of information on Saghalin and the Amur region in the account of Mamia Rinsō, translated by Ph. von Siebold.¹⁶ Rinsō traveled in those regions in 1808, and left a vivid description of Manchu administration in Saghalin and the taxes paid by the Ainu in furs. He also saw on the east coast near Taraika a boundary-stake inscribed with Manchu characters. A Manchu document is still preserved by an Ainu chieftain of Naiero.¹⁷

The reminiscence of their former dependence on the Manchu is still preserved even in the Ainu traditions of Yezo, in which are allusions to journeys of the people to the governor of Manchuria to pay their respects. Batchelor,¹⁸ who has recorded such a story, comments on this occasion that the ancient Ainu used to go yearly to Manchuria to render homage to the governor of that country, and on their way used to pass through Saghalin; that they used also to do business with the Manchu particularly when at war with the Japanese; and that possibly the Ainu were subject to Manchuria in very ancient times. This chronological definition is somewhat exaggerated. Saghalin became known to the Manchu only as late as during the reign of the Emperor K'ang-hi (1662-1722).¹⁹ It follows therefrom that the

¹⁵ Klaproth, *Aperçu général des trois royaumes*, p. 190.

¹⁶ Nippon, new ed., 2, p. 207-235; see chiefly p. 219-221.

¹⁷ Laufer, *Keleti Szemle*, 1903, p. 5.

¹⁸ *Transactions of the Asiatic Society of Japan*, 18 (1890), p. 42.

¹⁹ See Du Halde, *Description of the Empire of China*, 2, 247, or the original French edition, 4, 15 (this report relates to the year 1709); C. Ritter, *Asien*, 3, 450.

Ainu decimal system cannot be older than about the middle of the eighteenth century, when Manchu sovereignty over them was more firmly established. It hardly requires special mention that the numeral system of the Manchu is strictly decimal.

Pilsudski, in his interesting work previously quoted (p. 1-11), is the first author to offer some remarks on the phonetics of the Ainu language. Batchelor has almost neglected this fundamental part of the language, and his transcription of Ainu is no more than an attempt at adapting the English alphabet to the writing of Ainu. And then it is possible to compare with Hebrew and Indo-European, and even to stamp as Indo-European, a language the sounds of which are not yet accurately ascertained. Pilsudski says that Abbé Rousselot studied the phonology of Ainu with some individuals from Yezo at the Anglo-Japanese Exhibition in London, 1910, and communicates some of his results. I have been waiting for their publication on the part of Rousselot, but have not yet seen it. In 1900, shortly after my return from Siberia, I prepared a small Ainu grammar which for some reason or other was never published. In the interest of the progress of Ainu studies I deem it useful to check off my data and conclusions with those obtained by Pilsudski and to state the points in which we agree and those in which we differ.

One of the most interesting experiences in the study of Ainu phonology was to me the fact that all sonants in the series both of the explosives and spirants are lacking. As I was familiar with this phenomenon in many other languages, I naturally paid especial attention to it in examining the Ainu consonantal system. I was able to hear the guttural, palatal, dental, and labial *k*, *č*, *t*, and *p* only as pure surds, and summarized the result of these observations in my Ainu grammar literally as follows: 'To the ear the surds may sometimes sound like sonants, but even in this case no laryngeal intonation takes place. Indeed an Ainu is not able to articulate the sonants of the Russian and Japanese languages, and will invariably transform these into the corresponding surds. Russian *dal'se* "farther," for instance, is pronounced by them *tarše*; Russian *gul'ai* "to walk"²⁰ like

²⁰ In the Pidgin-Russian as spoken by the aboriginal tribes and the Chinese and Koreans of eastern Siberia, the Russian verb is usually employed in the imperative, regardless of the real form required.

kurai; Japanese *baka* "fool" becomes *paka*; *ōgi* "fan," *aunki*; *aruki* "a kind of bean," *aruki*. Ainu *kumaška* 'ruble' is the reproduction of Russian *bumaška* 'banknote, paper bill.' All close observers are indeed agreed on the one point that the sounds in question, both as initials and finals, are downright surds; this is the opinion, although not expressed by this strict formula, of Dobrotvorski, Batchelor, and also Pišudski.²¹ Batchelor remarks that 'no sonant letter begins a sentence, but in composition surds are sometimes changed into sonants, *k* turning into *g*, *p* into *b*, *t* into *d*.' This would be a sort of sandhi which occurs in exactly the same manner in Japanese, and which, owing to the long and familiar intercourse of both peoples, may conclusively be attributed to the influence exerted by the Japanese upon the Ainu language. Japanese likewise, as is well known, lacks the sonant explosives, and has developed them but secondarily in composition (the so-called *nigori*). It is thus not impossible, I concluded in 1900, that in a further stage of development Ainu will also develop such secondary sonants. On the southeast coast of Saghalin I had little occasion to note this change; on the contrary I recorded many examples with surds in composition, where a sonant is offered by Batchelor; for instance, *inumbe* 'wooden framework round a fireplace'—Saghalin *inumpā*; *humbe* 'whale'—Saghalin *humpē*; *rai-ge* 'to kill'—Saghalin *rai-ke* (-*ke* is a suffix forming causative verbs; *rai* 'to die').

Pišudski formulates his observations as follows: 'The explosives are *k*, *t*, *p*; *g*, *d*, *b*. These two groups are not unrelated. In Ainu there is really only one group; if the sounds occur at the beginning of a word, their normal sound is *k*, *t*, *p*. In the middle of a word, the sound wavers between the former, the voiceless group, and the voiced group *g*, *d*, *b*. Strictly speaking, these are not identical with their Indo-European corresponding consonants. They are, I should say, neither *fortes* or *lenes*; they are *between*. And then, which is yet more important, their conditions of combination are to be noticed. For instance, after *m*, these consonants readily acquire a certain sonoroussness of tone, which probably does not last during the whole time of their

* F. Müller (i.e. p. 163) has added *g*, *d*, *b* to the consonantal system of the Ainu, for which there was no occasion even at his time; he had accordingly not read Dobrotvorski.

articulation. The outcome of this was that in very many cases I was unable to determine the nature of the consonant, as I heard a sound that could not be identified either with the former group or with the latter. At all events, among the Ainu of Saghalin, the normal and primary group is *k*, *t*, *p* (voiceless), possibly less strongly articulated in certain connections. Their corresponding sounds (*g*, *d*, *b*) more or less voiced appear only as secondary variations. On the western shore of Saghalin the latter group is more often to be met with than on the eastern shore.'

The last observation accounts for the fact that on the east coast I heard so few *g*, *d*, and *b*; I had no occasion to visit the southwestern shore of the island. Although Pilsudski expresses himself somewhat differently, I believe that I am perfectly in accord with him as to the facts in the case, save that I am not yet convinced that the Saghalin dialect possesses genuine sonants. In my estimation, these sonants are also voiceless.²¹ With respect to the Yezo dialect I do not hazard an opinion, not having had an opportunity of hearing it.

I concur with Pilsudski in the observation that the explosives are capable of palatalization, except that I do not believe with him in the existence of *b'* and *g'*, and have to add *t'* to his *k'* and *p'*. Palatalized *t'* alternates with palatal *č* (see below, p. 204-5).

Pilsudski asserts that the palatal sonant *j* also occurs, but only in very few words after a nasal, as in *unji* 'fire', *tunji* 'interpreter'—cases already cited by Dobrotovski. The latter example proves little, as it is a loan-word; Batchelor writes it *tuncī*, and in my own collectanea I have *tuncīnē* ainu 'interpreter': it is Sinico-Japanese *tsūji*, Chinese *t'uh* (*t'ung*)-*ši*. This word has been carried by the Chinese all over Eastern and Central Asia; it is heard in Tibet as well as in Mongolia and Manchuria (Manchu *tuwse*, Golde *tunsiko*, Oročon *tuñksa*). It is curious that the first element of the Ainu loan-word agrees with the Manchu form, the second element with Japanese. At any rate this example is not conclusive as to the existence of an original *j* in Ainu. In regard to *unji*, I myself heard only *uncī*, and Batchelor gives both *uncī* and *unji*, so that this *j* represents

²¹ Compare Sievers, *Phonetik*, § 348.

č, and is again inspired by an imitation of the Japanese *nigori*. A Japanese initial *j* is transformed by the Ainu into the palatal surd; for instance, *jo* 'lock' becomes *čo*.

As final consonants occur the three explosives, the four nasals *n*, *n*, *n'*, and *m*; and *s*, *r*. In regard to the final explosives I made the curious observation on Saghalin that they were about to disappear, that they were dropped altogether by most individuals, while a few in some cases pronounced them with a rather obscure articulation, the preceding vowel being greatly shortened and uttered harshly and abruptly. Thus:—

YEZO	SAGHALIN
<i>gul</i> 'sing'	<i>gū'</i>
<i>tel</i> 'hand'	<i>te'</i>
<i>šuk</i> 'bear'	<i>šū'</i>
<i>marč</i> 'spear for salmon'	<i>marč'</i>
<i>spol</i> 'to wrestle'	<i>spol'</i>
<i>čep</i> 'sun, moon'	<i>čū'</i>
<i>čenjop</i> 'quiver'	<i>čenjō'</i>
<i>ossep</i> 'a large seal'	<i>osseč'</i>
<i>čep</i> 'fish'	<i>čč'</i>
<i>at</i> 'flying squirrel'	<i>o'</i>

Pilsudski states that certain final consonants are not completely articulated and only very faintly heard, but his description of the process is not quite clear. In all probability the history of this event was such that the final explosives were first changed into the spirant *x* (see below, p. 202-3), which is now gradually giving way. We have, for instance, Yezo *stok* 'source, origin, limit', Saghalin *stox* and *sto*; *mat* or *max* 'woman' becomes *ma* in composition: *kaji-ma* 'old woman,' *koš-ma* 'daughter-in-law.'

In the combinations *pk* and *pt*, when occurring as medial sounds, the labial explosive is eliminated in the dialect of Saghalin:—

YEZO	SAGHALIN
<i>ataye-yupke</i> 'expensive'	<i>atayuhč</i>
<i>apotoron</i> 'it rains'	<i>atoron</i>
<i>irangarapte</i> 'a greeting'	<i>trañkaratč</i>

Medial double *k* of the Yezo dialect corresponds to *sk* on Saghalin: Yezo *ikka* 'to steal,' Saghalin and Kuril *iska*.

Pk and *kk* interchange: Yezo *kupka* and *kukka* 'mattock.'

Of nasals, Ainu possesses at present four—the guttural *ñ*, palatal *n'* or *ñ*, the dental *n*, and the labial *m*. Only the two last-named may be considered as original constituents of the language. The guttural nasal *ñ* (*ng*) has originated from dental *n* before the guttural explosive:—

Kusuh-koten, the town Korsakovsk
ahun + *kani* = *ahuskan* 'to enter'
ahun + *ke* = *ahuske* 'to let enter'
ehan + *ke* = *ehaue* 'near'
itahki 'teacup'; Bachelor spells *itangi*
kuuskan 'gold,' Japanese *kogane*
ah-kutibi 'metal girdle'
tsukori 'a musical instrument'

As equivalent of Yezo *žinnam* 'cold, frost' I noted on Saghalin *žinnamai*.

As a final, *ñ* occurs very seldom; for instance, *kakuñ* 'pouch,' *kamigun* 'thunder.'

The palatal *n'* occurs only before *e* or as a final, and the palatalization is weak and almost imperceptible. *N* changes into *m* before labials: *fan* + *pe* = *tamp* 'this thing.' Yezo final *m* sometimes becomes *n* or *ñ* in Saghalin: Yezo *haram* 'lizard,' Saghalin *harian*; Yezo *hum* 'voice,' Saghalin *huñ*. Final *n* and *s* after *o* and *u* may be dissolved into *i*, thus forming a diphthong, or being lengthened:—

pon *čika(p)* 'small bird' becomes *poi* and *pō* *čika(p)*
wet *ainu* 'a bad man'—*wet* *ainu*
to *rus* 'bear-skin', for *rus*
tonči and *toiči* 'pit, dilapidated habitation'
 Yezo *seton-ni* and *setoi-ni* '*Pyrus* *toringo*'

The spirant *x* has been observed by me in the same manner as by Pilsudski and in the Kuril dialect by Radliński. It occurs as initial, medial, and final, corresponding not only to *p*, *t*, or *k* of Yezo, but also to *h*, *c*, and *ra*.

SAGHALIN
<i>oax</i> 'one of a pair'
<i>maz</i> 'wife'
<i>zur</i> 'belt, girdle'

YEZO
<i>oora</i>
<i>mat, maci</i>
<i>kuobi</i> (Kuril <i>kut</i>)

acto 'rain'	apto
oyarto 'abroad, away'	oyakto
čuz, čap 'sun'	čap
surorže 'they sit' from rok 'to sit'	
sinor and sinot 'to play'	

There is no doubt that Yezo has preserved the original condition, and that *x*, which is absent in Yezo, presents a secondary development on Saghalin. Sometimes *x* appears as a euphonic insertion, as in *reporxe* 'a sea-animal' from *rep* ('sea') + *ox* (instead of *o*, 'in, inside') + *pe* ('thing, creature'), or in *pinoxponne* 'stealthily' from *pi* ('secret') + *no* + *ponne* (two adverbial suffixes).

Pilsudski explains that *f* occurs but rarely, and as a secondary sound, produced by the influence of the neighboring vowel (*kuf*, *kux*, *kuči* 'girdle,' original form *kut* or *kuf*); *p*, when weakened, sometimes becomes *f*, but is always accompanied by *u* (*čup* or *čuf* 'luminous body, sun, moon'). I heard *f* in *čufčikin* 'east,' but *čupahun* 'west.' In *utufia* 'between,' from *uturu* 'interval' and *oxta* 'in,' *f* seems to be evolved from *x*; compare also *ekorxe* and *yokofpe* 'a single rock in the sea.' Batchelor says that 'the letter *f* resembles the true labial in sound, it being softer than the English labiodental *f*; it is always slightly aspirated as though indeed it were *h*.' On Saghalin I heard *f* and *w* as bilabials, seldom as dentolabials, and only in the combination *fu*. All examples of initial *f* given in Batchelor's *Dictionary* and occupying but two pages are indeed of the type *fu*, and several cases show an alternation of *fu* and *hu*: *fuči*—*huči* 'fire,' *fura*—*hura* 'seemt,' *furu*—*huru* 'hill,' *fuško-toita*—*husko-toitu* 'anciently,' *futtat*—*huttat* 'bamboo grass.' Dobrotvorski enumerates after doubtful older sources a few words beginning with *fa*, *fe*, *fi*, *fo*, but all these can be easily traced to initial *h*, *p*, or *w*; for instance, Dobrotvorski's *faibo* 'mother' in fact is *habo*, *faigar* 'spring' is *paikara*, *fambe* 'ten' is *wambe*, *fets* 'river' is *pet*. None of these examples speaks in favor of an original *f*. It is plain that the use of this fricative is very restricted, and, as justly emphasized by Pilsudski, is secondary. When Batchelor adds that it is often found in words which appear to be of Japanese origin (this observation was made also by Dobrotvorski), I believe that this points to the real source of the consonant in Ainu, which in my estimation was adopted by them from the Japanese in comparatively late historical times. This assumption would harmonize

with the fact that in the dialect of Kamchatka and the Kuriles *f* is absent; Radlinski at least does not give any word with initial *f*. In Japanese also, *f* occurs only before the vowel *u*, *h* being substituted for it with the other four vowels; or rather the rule should be formulated that *h* before *u* becomes *f*. In Japanese likewise, *f* and *h* (probably developed from *p*) are interrelated.

In regard to *h* and *w* I have nothing to add to the remarks of Pilsudski, except that I am not inclined to accept his view that *w* (or, as he writes it, *v*) is always voiced.

Of sibilants I distinguished in Saghalin Ainu three—the dental sibilant *s*, the palatal sibilant *š*, and an intermediary sound transcribed *z*, in the formation of which the tip of the tongue moves farther down than in the two former. This *z* I regarded not as an independent sound, but as secondarily developed from *s* before certain vowels within a word, and as perhaps representing merely an individual variation, as some persons pronounced a plain *s* in the place of *z*. In all probability it is developed from a palatalized *s* (*s'*). Pilsudski denies and rejects *š* entirely, and replaces it by *š*, equalizing the latter with Polish *š*,²¹ and defining it as between *s* and *š* with a distinct palatalization, or an approach to the position in which *š* is articulated. Abbé Roussetot remarks that *s* is formed by the tip of the tongue held somewhat downward, and its upper surface (dorsum) raised toward the palate. I have no doubt that Pilsudski's *š* (not heard or noted by Batchelor) coincides exactly with my *š*, especially as his examples of *š* agree with my records of *š* (for instance, *sam* 'to marry,' *i-sam* 'to marry me'—where Pilsudski justly attributes the origin of this *š* to the influence of the preceding vowel *i*),²² but I am convinced also that a genuine palatal *š*, as recorded by Batchelor for the Yezo dialect, likewise exists on Saghalin. This observation is confirmed by the fact of a phonetic alternation of *t*, *t'*, *c*, and *č*.

Compare the following examples:—

²¹ The same observation was already made by A. Pfizmaier, 'Erörterungen und Aufklärungen über Ainu,' p. 30, *Sb. Wiener Akad.* 1882.

²² Some examples noted by me are *seta* 'dog,' but *pó-seta* 'small dog' (*pó* originated from *pon*, *poi*); Yezo *sesek*, *seset* 'warm'—Saghalin *šet*; *ras* and *ras'* 'skin'; *ais* 'eye'; *ča* 'to weep, to grieve.'

Kuril <i>peonatarp</i> 'green'	Saghalin and Yesso <i>hussis</i> 'green,
<i>peonatarpa</i> 'yellow'	<i>yellow'</i>
(Klaproth: <i>peunina</i>)	
Saghalin <i>t'is</i> , <i>t'ise</i> , <i>t'ie</i> 'house'	Yesso <i>čisei</i>
Yesso <i>inuye</i> , <i>zinuye</i> 'to tattoo, carve'	Saghalin <i>inuye</i> , <i>činuye</i> , <i>zinuye</i>
Kuril <i>kut</i> 'girdle'	Yesso <i>kučiki</i> (<i>kutčiki</i>)
Kuril <i>po-mut</i> , <i>o-po-moc</i> 'daughter'	Yesso <i>mat</i> , <i>maci</i> (<i>matči</i>) 'wife'
	<i>matne</i> 'female' of animals
	Yesso <i>etu</i> , <i>čet</i> , <i>čietu</i> 'spout, handle'

Of liquidae Ainu possesses only *r*. *L* is absent, as in Japanese. In Russian loan-words *n* is substituted for initial *l*, while Russian medial *l* becomes *r* or is dropped entirely. The Russians are called by the Ainu *Nuča* instead of *Luča*, the general name for the Russians among the Amur tribes. Russian *gal'ni* 'to walk' is pronounced by the Ainu *kurai*. Ainu *čačiki* 'chief, commander, superior' (address to all Russian gentlemen) is derived from Russian *načal'nik*. Piłsudski affirms that he heard clearly *l* instead of *r* pronounced by many persons on Yesso in the village Piratori and still more frequently in Shiravoi. This observation is confirmed by Abbé Rousselot, who says that *l* exists only as a modification of *r*. Accordingly it is a mere local variation, and cannot be credited to the fundamental phonetic system of Ainu. *R* has its normal articulation; only as an initial it is, according to Rousselot, semi-occlusive, yielding such variations as *r*, *tr*, *kr*, *tl*. Piłsudski heard *tr* or *dr* only after *n*, and noted a frequent interchange of *t* and *r*, particularly among the Ainu of the north. I heard *tašoku* 'candle' for Japanese *rosoku*, and *tečara* 'white' for Yesso *retara*.

The consonantal system of modern Saghalin Ainu is accordingly composed as follows:—

	Explosives		Nasals		Spirants
	Palatalized				
Gutturals	k	k'	h	z	h
Palitals	c		n'	č	
Dentals	t	t'	n	s	s'
Labials	p	p'	m	f	w
Liquids	r				

Eliminating the secondary, more or less modern, developments, we obtain the following:—

	Explosives	Nasals	Spirants
Gutturals	<i>k</i>	—	<i>h</i>
Palatals	<i>č</i>	—	<i>č</i>
Dentals	<i>t</i>	<i>n</i>	<i>s</i>
Labials	<i>p</i>	<i>m</i>	<i>w</i>
Liquids	<i>r</i>	—	—

That this limited inventory of eleven sounds bears no relation to Altaic, Indo-European, Semitic, or Bask, with all of which Ainu has thoughtlessly been compared, must be patent to every one. Ainu is an isolated language at present, its congeners, if they ever existed, being extinct long ago.

Of all sounds the vowels have been most unsatisfactorily fixed in the Ainu texts hitherto placed on record. Batchelor and Pilsudski note merely *a*, *e*, *i*, *o*, *u*, while Abbé Rousselot points out that *a*, *e*, and *o* may have the three different qualities of timbre found in French. In the speech of Saghalin I discerned eight vowels—*a*, *ā*, *e*, *ɛ* (*e* in *gardener*), *i*, *o*, *ā* (English *aw*), *u*, and the semi-vowels *y* and *ȳ*. In the articulation of *ā* the larynx is lowered, the tip of the tongue is pressed downward, and the orifice is rounded. This vowel is important, as it sometimes occurs in the same word beside ordinary *o*, and as there are homonyms distinguished only by these two timbres of *o*; for example, *porā* 'seal,' *pā* 'to boil' (intr.), but *po* 'child.' The diphthongs are *oi*, *ao*, *au*, *eo*, *eu*, *ou*, *oi*, *āi*, *ui*, *oa*, *ua*, *ya*, *ea*. As the language has no accentual stress, but only a musical accent (as in Japanese or French), the distinction between short and long vowels is very slight. There are no naturally long vowels, but all vowels may be artificially lengthened under the force of the chromatic accent. In conversation, the word *pirika* 'good, well,' for instance, may be heard according to circumstances in three different ways—*pírika*, *pirika*, and *piriká*. Monosyllables terminating in a vowel as a rule evince a tendency to being somewhat lengthened; for instance, *kū* 'bow,' *tū* 'two.' Lengthened vowels, moreover, arise from contraction of two vowels into one or from elision of consonants: *či* + *okai* yields *čökai*; Yezo *ataye-hauke* 'cheap' becomes *atähauki* on Saghalin; *pon seta* 'small dog' develops into *poi seta* and *pōseta*; *pūrai* 'window' co-exists with *pugurn*. Many vowels between consonants show a tendency to evaporate and to be almost eliminated: *seta* 'dog'—*s̄ta*, Kuril *sta*; *šiken* 'sledge'—*š̄ken*, Kuril *skini*; Yezo

čikap 'bird' becomes on Saghalin č'ka, čka, čkapu, and čkap. This fact accounts for the many consonantal combinations in the Kuril dialect, like *st*, *sk*, *kr*, and others, which are otherwise foreign to the language.

Pilsudski observes: 'It seems that the Ainu make no fixed distinction between short and long vowels; that is, they know nothing of quantity properly so-called. We can only say that an accented syllable is longer, and may be simply termed long; but this length is in strict connection with the accent. However, we do meet with fixed differences in quantity in certain words the sound of which would otherwise be the same; their only distinctive quality is the length of articulation.' As examples he cites *i* 'to eat' and *ē* 'to come,' *rū* 'way' and *rū* 'ice in the river' or 'a flock of birds.' Pilsudski has further made a new and interesting observation, namely that a few homonyms change their accents to bring out a change of meaning; thus, *ātai* 'chair'—*ātai* 'payment'; *ān-koro*, possessive pronoun—*ān-korō* 'I have'; *siri* 'earth'—*siri* 'payment'; *ūma* 'horse'—*ūma* 'also.' The same phenomenon is encountered also in Japanese: *āme* 'rain'—*āme* 'a kind of sweetmeat'; *hāsi* 'chopsticks'—*hāsi* 'bridge,' etc.²³ It would not be surprising that the Ainu, as in so many other cases, should have imitated the Japanese model.

Some vocalic changes in the various dialects are noteworthy. Final *a*, for example, is eliminated in the Kuril dialect:—

KURIL	YEZO
<i>rip</i> 'high'	<i>ripa</i> (Saghalin <i>ripa</i>)
<i>rer</i> 'wind'	<i>rera</i>
<i>rar</i> 'eyebrows'	<i>rara</i>
<i>car</i> 'mouth'	<i>cara</i> , <i>čara</i>
<i>mukar</i> 'ax'	<i>mukara</i>

The Saghalin and Kuril dialects have sometimes preserved a final *u* which is dropped in that of Yezo:—

Saghalin and Kuril <i>eramu</i> 'rat'	Yezo <i>erum</i>
Saghalin <i>ihoku</i> 'to buy'	Yezo <i>ihok</i>

²³ For other examples see B. H. Chamberlain, *Handbook of Colloquial Japanese*, 3d ed., p. 20. The accent is so extremely slight that it will be hardly noticed by an untrained ear, but it really exists, as I had many times occasion to convince myself. It cannot be compared in strength with the energetic tonal accents of Russian in such pairs of words as *zdmok* 'castle'—*zamok* 'lock'; *mäkä* 'grief'—*mukä* 'flour'; *öbras* 'manner'—*öbräz* 'pattern'; *pölnöci* 'midnight'—*polnöci* 'half a night.'

When more exact records of the various dialects are placed at our disposal (and there are none thus far of the Kuril dialects), it will be possible to establish a greater number of phonetic laws and to trace the history of Ainu speech, possibly lending also to a clue as to tribal migrations. The fact that the Yezo and Saghalin dialects are closely related was, of course, known long ago; but the theory that the idiom of Saghalin is purer or more archaic must be disputed. Despite the possibly larger variety of vowels, diphthongs, and spirants (x and z, both of secondary origin), the phonetic system of this dialect shows decided evidence of a far more advanced state of disintegration and even deterioration. The dialectic differentiations are largely phonetic and lexicographical; accidence and structure appear to be the same everywhere. According to statements made to me by natives of Saghalin, their language is not divided into dialects, but is spoken with a high degree of uniformity. Local variations of words are frequent, particularly in the names of animals: an eagle is designated in Naiero *furō*, in Naibūči *pisetteri*; Naiero *szamakka* (explained as 'a black sea-eagle with a red-tipped beak') answers to *onnim* of Naibūči; a strap of sea-lion skin used for carrying loads is styled *scīkā* in Ottasam, but *tarā* in Naiero and Taraika. There are likewise identical words with different meanings on Yezo and Saghalin; for instance, *hoīnu* on Yezo means 'marten,' on Saghalin 'sable.' We need a complete dictionary of the Saghalin dialect for further comparative study; we need a good grammar of the language, not after the fashion of the Latin grammar, but one interpreting the spirit and laws of the language from within. We have had enough theories and fancies about the Ainu; it is time to get at the facts.

THE SABBATH AND FESTIVALS IN PRE-EXILIC AND EXILIC TIMES

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In order to trace the origin of the Sabbath and the festivals and follow up the stages of their development, we must not consult the codes of law and the meaning attached to the words of the same in later times, but examine certain historical facts in the other narratives and in occasional allusions and draw our conclusions therefrom. By this method of historical-critical research we arrive at an altogether different calendar system in ancient Israel than that with which we are familiar. The Sabbath and the festivals have gone through a process of evolution which we must try to unravel and which few of our historians have made clear. Nor have our Assyriologists succeeded in elucidating this process, especially in regard to the Sabbath, as the recent work of Morris Jastrow, *Hebrew and Babylonian Traditions*, and an article of his on 'The Day after the Sabbath' (*AJSL* 30, 94 ff.) seem to show.

THE SABBATH

To begin with the Sabbath, let me state that we know as yet too little of the Assyrian Sabbath to build important theories concerning the origin of the Jewish Sabbath upon it. The name *Shabbatum* in the Babylonian calendar has been found by Pinches in a glossary to designate the full moon; hence the Hebrew Sabbath must have had the same meaning, according to Jastrow, Meinhart, and others. On the other hand there was brought to light long ago a Babylonian *Elul* calendar according to which the 7th, 14th, 19th, 21st, and 28th days were regarded as unlucky days, on which the priest-king was not allowed to officiate as judge, use fire, eat cooked meat, etc.; but the term Sabbath is not applied to these *dies nefasti*. Now, while the older Assyriologists were inclined to identify these days of the *Elul* calendar with the Hebrew Sabbath (suggesting that the nineteenth day was really the forty-ninth—that is, seven times

seven, counted from the beginning of the previous month), modern Assyriologists no longer lay stress upon this fact, and insist instead upon the other fact that Shabbatum designates exclusively the full moon. Combining with it the etymology of Shabat, which is elsewhere explained by *gamar* 'to complete,' they explain the term Shabbatum to be the time of the completion of the moon's light, 'when the sun on the other side of the sky casts its full light upon it.' Prof. Jastrow goes even so far as to explain the term **מִבְּחֹרָה הַשְׁבָתָה** to have meant originally the morrow of the full moon, because the Passover feast begins on the 15th of Nissan, assuming the verse in question to belong to two or three different sources. As we shall later see, the whole argument regarding the Passover feast rests on a fundamental error. But aside from that, I do not think that there is any basis or justification whatsoever for identifying the Hebrew Sabbath at any time with the full moon. It seems to me that we are not in a position as yet to assume with any kind of certainty that the Hebrew Sabbath was simply taken over from the Babylonians, at least in historical times. Like all the things Babylonians and Hebrews had in common, the Sabbath seems to me to belong to an older epoch when the Babylonian lore was not as yet developed, and the Hebrew Sabbath may just as well throw light on the Babylonian Shabbatum as vice versa. Each had its own process of growth.

This much, however, is certain, that the Hebrew Sabbath is not only older than the Decalogue of the Exodus, which connects it with the Creation week, as does the Elohist in the first chapter of Genesis, but also older than the original form of the Decalogue: **זָכֹר אֶת יוֹם הַשְׁבָתָה לְקָרְבָּנוֹת**, which refers to the Sabbath as an established and known institution, and is by no means a new commandment. It is, however, quite noteworthy that the older Decalogue of Ex. 34 simply says, **שְׁשַׁת יְמִינֵיכְם הַעֲכֹר וּבְנֵיכְם**, while the same Sabbath is implied but not mentioned. The chapter on the Manna, Ex. 16, offers indubitably an explanation for the Decalogue expression **זָכֹר אֶת יוֹם הַשְׁבָתָה** by the narrative's placing the commandment of the Sabbath before the Sinai Revelation—a point of view which the rabbis present in connection with the words **שֶׁם שֶׁם לוֹ חַק וּמִשְׁפָט** in Ex. 15. 25 (see *Mekilta*, ad loc.).

For us, however, the question is whether the Hebrew Sabbath was from the beginning based upon the fixed institution of the week, which certainly rests on Babylonian astrology, or whether it originally corresponded with the four lunar phases, so that the seventh, fourteenth, twenty-first and twenty-eighth of each month were the days of the moon's 'stand-still,' that is, Sabbath days. The latter view is expressed by Nowack, *Hebr. Arch.* 2 144, who refers also to Wellhausen, *Prolegomena*², p. 107. It seems to me that too little stress has been laid on the important fact that, throughout the entire pre-exilic literature, the Sabbath occupies only the second place alongside of the new moon, which is always mentioned first and foremost as a day of rest and of feasting, of sacrifice and of seeking the word or oracle of the Deity as given through the sacred seer. I refer to the well-known passages, 2 Ki. 4. 23; Am. 8. 5; Hos. 2. 13; Is. 1. 13; 66. 23, where **חֶרֶשׁ** always precedes the Sabbath. Down to the Exile—Ezekiel forms the interesting turning-point, as we shall see later on—the New Moon played a far greater role in ancient Israel than may be inferred from the Mosaic Code, where it is no longer made a day of rest, but has only the character of a survival in the Temple Cult. Note, however, Amos 8. 5, where the people are represented as saying: **מִתִּי עַכְרַת הַחֶרֶשׁ שָׁבֵר וְהַשְׁבֵת וְנַפְחַת כָּרֶן**: *nashbirah shber v'hashbet v'nephachah caren* i. e., they could not sell corn on the New Moon, just as they could not on the Sabbath. Very characteristically we find the day previous to the New Moon, and in distinction from the same, called by Jonathan (1 Sam. 20. 19) **יֹם הַמְעָשָׂה** 'Work Day,' which plainly shows the New Moon to have been celebrated by the people as a holy day. The presumption, then, is that the New Moon was the more solemn holy day, given over to feasting and sacrifices of a higher order among the families, such as we find it celebrated in the royal house of Saul and occasionally among certain classes in Israel (בְּכָח הַיּוֹם שָׁם לְכָל הַמְשָׁפָחָה 1 Sam. 20. 6), over against which the Sabbath days of the month were but, so to say, diminutive moon seasons, four holy days of lesser solemnity and importance. But this very chapter reveals a fact the importance of which has not been recognized by historians. It is the agreement of David and Jonathan to meet again in the field on the third day, that is on the day following the two New

Moon days (20, 5, 12, 19). That they could thus speak beforehand of the two New Moon days as a self-evident matter shows that the New Moon was not celebrated only on the first day of the month, when the reappearance of the moon had been observed by the respective functionaries, but on two days; that is, on the twenty-ninth and thirtieth days of the month, the latter day leading over to the next month, which was counted from the day following as the first day of the first lunar week. We get in this way the following division of the month: four lunar weeks, each ending with the Sabbath, and these twenty-eight days to be followed by the two New Moon days—thirty days altogether. But they occasionally divided the month into decades as did the Egyptians, and as we learn from the term **עַשְׂרֵה** and **עַשְׂרֵת**. As a rule, however, the heptad prevailed. The holy number seven belongs to very ancient Semitic traditions, as all the oaths are made among the various Semitic tribes by the number seven. Hence we have the word **נִשְׁבַּע** 'to swear,' which means 'to be bound by the holy seven.' (Whether the seven planets or Pleiades or some other seven was the object is not as yet ascertained.) The name **שְׁבֻעָה** for week, also **שְׁבֻעָה** (in Jacob's story: **פְּלָא נָא שְׁבֻעָה אֱלֹהִים**, Gen. 29, 27) is certainly old. All the festivities in private and public life filled up a full week, and, strange to say, the Sabbath is never mentioned in this connection. Not even in the story of the siege of Jericho is there any mention of the Sabbath. This can be accounted for only by the assumption that the Sabbath as a separate institution is of a later date.

The new and full moon, however, were celebrated by all Semitic, nay by all primitive, tribes. The Moon was the real Measurer of time, as the Greek or Aryan *μήν* expresses it. Especially for the wandering tribes of the desert the Moon is the guide on the night march. Consequently the Bedouin still hails the appearance of the new moon with shouting, dancing, and clapping of hands, as Doughty describes it in his *Arabia Deserta*. And we learn from Job 31, 27 that the idolatrous practice of throwing kisses at the moon was still practised when that book was written. How much of a rerudescence of this was allowed to come in by the cabballistic writers in the solemn greetings of the Kiddush-Lebanah rite, is not necessary to point out here. At any rate the New Moon celebrations, which were undoubtedly connected

with the Canaanite or Semitic worship of the queen of Heaven, and the round cakes, כְּלִינָה, offered her on the roof-tops of the houses, as we learn from Jer. 44. 17—25, could not but meet with disfavor on the part of the Hebrew legislators. Here we have the reason for the abrogation of the New Moon as a day of rest. Only the priestly tradition retained the New Moon in the cult (Ezek. 45. 17; 46; and Num. 28. 10 f.). The Cabbalists, or Mystics, during the late Middle Ages gave dignity to the New Moon, and by a strange atavism, the Jewish women—compare the women in Egypt mentioned by Jeremiah—desisted on that day from doing work. The priest-prophet Ezekiel in his legislative system accords to the New Moon only the second place alongside of the Sabbath (cf. Ezek. 46. 1—3). A still more interesting change which the New Moon has undergone in the writing of Ezekiel, and which henceforth influenced the literature of the Jewish people (Num. 28. 10 and elsewhere) is that the name is changed from חֶרְבָּשׁ 'renewal' into רָאשׁ חֶרְבָּשׁ 'beginning of the month,' and חֶרְבָּשׁ henceforth stands for month. We shall soon see what this implied for the regulation of the festivals in the Mosaic Code. But we have to turn our attention first to the new concept of the Sabbath.

The Sabbath is transformed in the Decalogue from a lunar holy day into a day of the Lord, and made an institution independent of the phases of the moon, a weekly institution, whether for the rest of man, as the Deuteronomic decalogue has it, or as a testimony to God's creation of the world in a seven-day week, as the decalogue in Exodus has it. The latter idea is, of course, a transformation of the Babylonian myth in the monotheistic spirit. With Ezekiel (20. 20) begins the special accentuation of the Sabbath as a sign between Israel and his God, and hence also the Holiness Code, which emanated from the Ezekiel school, renders it a special sign of the covenant between Israel and the Lord (Ex. 31. 13, 17). In the Priest Code the ancient concepts of the Sabbath as a day of austerity and of the prohibition of labor, of the use of fire, of cooking, etc., made themselves felt again, and this led to ever greater rigidity in the Sadducean and Karaite and then in the Shammaite circles, whereas the Exilic seer in Is. 58. 13 voices a different view regarding the joy and cheer on Sabbath, though wishing to have the day devoted to divine things exclusively. The passage in Jeremiah (17. 19—27)

threatening those that trade on the Sabbath with the conflagration of the city belongs to the time of Nehemiah and ought never to have been assigned to the great prophet.

Before concluding my views on the Sabbath, I wish to call attention to the one fact which the Assyriologists have failed to consider. Had the Sabbath been really known in Babylonia as a holy day outside of the priestly cult, the Biblical Sabbath could never have been made the sign of the covenant, or a mark distinguishing the Jewish people from the rest, as is already done by Deutero-Isaiah and by Ezekiel. The idea of the distinction of Israel from the surrounding nations became the guiding motive in the Mosaic Code also for the festivals, as we shall now see.

PESAH.

There can hardly be any dispute as to the meaning of **חֶרֶשׁ** 'New Moon,' wherever it occurs in ancient literature. Let me ask, then, when is Passover to take place, according to Deuteronomy? There can be but one translation of 16.1, **שְׁמַר אֶת חֶרֶשׁ פֶּסַח לְיְהוָה אֱלֹהֵינוּ כִּי בְּחֶרֶשׁ הָאָכִים הָרְצָאָרִים** 'Observe the New Moon of the Ripening Crops and offer the Paschal sacrifice, for on the New Moon of the Ripening Crops hath the Lord brought thee out of Egypt at night.' To translate **חֶרֶשׁ** by 'month' is simply impossible in view of the word **לִילָה** at the end of the verse. In other words, the Passover at the time of King Josiah was celebrated, not on the eve of the 15th, but on the eve of the New Moon. Nor was it, as described in Exodus 12, the sacrificial day of a lamb, but, as we read in the following verse, of all kinds of animals taken from the flock and the cattle. This Deuteronomic precept receives its light from Ex. 13.1—10, 11—16, where we have the duplicate of the law prescribing consecration of the first-born of man and beast and the sacrifice of the first-born of the beast on the memorial day of the Exodus. There we read also: **הַיּוֹם אַתֶּם יֹצְאִים כִּחֶרֶשׁ הָאָכִים** 'This day have you been going out of Egypt on the New Moon of the Ripening Crops.' So also in Ex. 34.18 and 23.15 (where the same law is given concerning the Feast of Mazzoth with especial reference to the redemption, or sacrifice of the first-born). There we find also the express statement **כַּאֲשֶׁר צִוָּתִיךְ לְמַעַרְךְ חֶרֶשׁ הָאָכִים כִּי בְּחֶרֶשׁ הָאָכִים**

תְּנַחַת מִצְרָיִם 'On the New Moon of the ripening of the Crops didst thou go out of Egypt.' By the way, let me say here that that little fragment in Ex. 4. 22—26, תְּנַחַת אֶת בֶּן־בָּנָךְ ending with בָּנֵי בָּנָרִי יִשְׂרָאֵל belongs to the oldest stratum of the Exodus story in connection with the Pesah, connecting the Shepherd Spring feast with the death of the first-born. Originally then the Pesah as a festival of Spring was celebrated on the New Moon of the Spring Month, when the blood of the first-born of the flock or cattle was put on the forehead and hand of the people, and also sprinkled on the door-post and door-sill, a practice that is still in vogue among fellahim natives of Palestine, Syria, and the Arabian peninsula (see Curtiss, *Ursemitische Religion*, p. 206 ff. and Dillmann, ad loc.). The change from the New Moon to the Full Moon is first recorded by the prophet Ezekiel, 45. 21, and then in the priest code, Ex. 12 and Lev. 23, which latter chapter is of composite nature and not a pure product of the Holiness Code. As a matter of fact the Passover feast was only, in consequence of the Deuteronomic Code, transformed from a Shepherd household feast into a national festival under King Josiah (2 Ki. 23. 22), and then connected with the Mazzoth feast.

THE FEAST OF WEEKS

Coming to the Feast of Weeks, we observe that it nowhere has a special date as to the month, or day, like the other festivals. It was and remained even during the period of the second temple an agricultural festival, the time of which was determined by the end of the harvest of the barley and wheat crops, which lasted seven weeks. The Deuteronomic Law simply says: 'Thou shalt count seven weeks'—that is seven times seven days, without a mention of the Sabbath anywhere—'and then thou shalt celebrate the Feast of Weeks.' The older code of the Covenant calls it קָצֵר adding בְּכוֹרִי בְּעֵשֶׂן (קָצֵר). Ezekiel does not mention it at all; for שְׁבֻעָה in 45. 21 is a scribal error. But the law in Lev. 23. 9 ff. devotes to it a long paragraph, which has become a matter of dispute not only among priest and sage, Sadducee and Pharisee of olden times, but also among the scholars, Jewish and non-Jewish, to this very day. I refer to the well-known passage in verses 15—17. I hold that no unbiased reader can translate this otherwise than

the Sadducees originally did: 'Ye shall count from the day following the Sabbath, on which day you bring the Omer of the first barley harvest [of which it expressly says, v. 11, **כמחרת השבת נייפנו הכהן**], seven weeks, and then on the following day, the morrow of the seventh Sabbath, which is the fiftieth day (Pentecost), ye shall celebrate the Feast of Weeks.' In other words, then, on the day following the Sabbath when they swung the sickle at the standing corn (which, of course, could not be done on the Sabbath Day), they offered the Omer of the first barley, and on the day following the seventh Sabbath, which is the fiftieth day, they brought the two loaves of bread made from the new wheat as a sacrifice for the Feast of Weeks. What has been lacking in this Biblical Law is a specific date, which was not necessary, as it depended each year on the time of the ripening of the crops. This was good enough for the priests of the Temple, but what about the Jew living far away from the holy land? Should he forego celebrating the Feast of Weeks? It is remarkable that the Book of Jubilees (6. 17 f.; 14. 20—21) takes the name **תְּנֵן הַשְׁבּוּעוֹת** to be the feast of the covenant oaths, telling us that the covenant made with Noah, with Abraham, and with Israel on Sinai were all made on the fifteenth of Sivan.

The rabbis, with reference to Ex. 19. 1, point to the giving of the decalogue as the historical event which took place on the sixth, or as R. Jose says in *Shabbath* 86 b, the seventh, of Sivan, the **יֹם כְּתָן תּוֹרָה—חַנּוּ קָצֵר יֹם שְׁבוּ נָגֵה הַוָּרָה לִיְשָׁרָאֵל** (*Shemoh R. 31. 17*), taking the term *Kazir* as the spiritual harvest, the day when the Law was given to Israel. Of course, the **חַרְבַּת הַשְׁלֵישׁ** here also can refer only to the first day, since it says **בַּיּוֹם הַזֶּה**. But the rabbis, or rather the Pharisees, wanted to have a close connection made between Pesah and Shabuoth in order to fix the date of the latter, and at the same time give it a historical character, and so they interpreted the words **כמחרת השבת** to mean 'on the day following the first day of Pesah.' So already the LXX has it. The first step to this connection between Pesah and the Omer sacrifice was taken at the time when the story of Israel's entrance into Canaan was told by the people, about which the Book of Joshua tells us that **כמחרת הפסח**, on the morrow of the Pesah, that is on the fifteenth day of Nisan, the

people ate Mazzoth of the produce of the land, while the Manna ceased. This **ככורה הפסח** in Joshua could serve as some kind of support to the Pharisees to refer the expression **ככורה השבת** of the Omer to the day after the first day of Pesah, while the Karaites and their predecessors, the Boethusians, and the Falashas refer it to the day after the last day of Pesah, so as to bring the Shabuoth festival close to the fifteenth of Sivan (see *Jubilees*, *l. c.*).

THE SUKKOTH FEAST

As to the Sukkoth festival I have long ago come to the conviction, and I now find also Dr. Ehrlich's commentary and Carpenter, quoted by Berthelot, *Leviticus*, p. 79, on my side, that the name has nothing to do with the harvest tents, as most modern exegetes think. There is nowhere such an allusion to harvest tents in the Bible, neither in Deuteronomy, where we might expect it, nor in Exodus 23. 16 or 34. 22, where it is simply called **חנָה האסֵף בצאת השנה** or **תְּקִיףַת הַשָּׁנָה**. As a matter of fact, it was the *Hag*, 'Pilgrimage Feast' *par excellence* (see 1 Ki. 13. 2; 12. 32; Lev. 23. 39—41; Ezek. 45. 23; Neh. 8. 14, and Mishnah *R. H.* 1. 2; cf. Nowack, *l. c.* 150). But it is an error to ascribe to the Sukkoth feast, as Nowack does on p. 155, the Deuteronomic law concerning the offering of the first fruits (Deut. 16. 1), as both the Mishnah *Bikkurim* 3. 2 and Philo (Mangey, 2. 298), who calls it 'the feast of the basket,' show that there was no connection between the two. Naturally the pilgrimage feast of the people took place after the summer's work was over, when they could come in large numbers to the temple of Shilo, or Jerusalem, as the Muhammadans come to Mecca for their *Hajj*. And where would they find a shelter, unless, as is done in Mecca, they would erect tents for all the strangers? This gave the pilgrimage feast the specific name of *Feast of Tents*. But the priestly legislator was not satisfied with this idea of a simple harvest festival. He was anxious to invest it with historical meaning, and so he connected it also with the story of the Exodus. But how? The usual interpretation is that the words 'I placed you in tents when I brought you out of Egypt' refer to the fact that the people, on their journey from Egypt in the Wilderness, dwelt in tents. But in this case the verse ought to read, **בְּחוֹצֵא אֹהֶם בְּכָרְבָּן**, not **בְּחוֹלֵיכֶם אֹהֶם בְּכָרְבָּן**.

אֹוֹתֶם כָּאָרֶן כְּצָדִים. A glance at the history of the Exodus and the list of journeys shows that Sukkoth was the gathering-place of the Hebrews, or the first station of their wanderings (Ex. 12. 37; 13. 20; Num. 33. 5). It matters not whether the name is derived from the tents built there, or whether the name happened to be Sukkoth, just as we learn of Jacob that he gave the name Sukkoth to a place where he built his tents (Gen. 33. 17). The idea is that God provided a place of tents as a gathering-point for the fugitive slaves at their exodus from Egypt. Hence also the controversy between R. Eliezer, R. Akiba, and other Tannaim as to the meaning of Sukkoth, whether it denotes the place of Israel's starting-point at the Exodus, or whether God built for them these tents, or whether He wrapped them in clouds like tents to protect them when He brought them out of Egypt (see *Mekilta* to Ex. 12. 37; 13. 20; *Sifra* to Lev. 23. 43). That the tents in which the wine harvest is celebrated by the people should have given rise to the festival, as is the opinion of the various expositors (see Dillmann, Berthelot and Driver on Deut. 16. 13, following Robinson, *Bibl. Researches*, 2. 81 f.), has no foundation in the Scripture, as there is nowhere any allusion made to the Sukkoth feasts being celebrated as a wine festival, whereas the pilgrimage tents correspond to the name Hag.

As regards the striking difference which exists between Nehemiah 8. 15, where the law regarding the Sukkoth tents is quoted, and the passage in Lev. 23. 40, I am quite sure that our Code text has undergone a transformation, and that the text in Nehemiah is more authentic. According to the latter the plants mentioned were all used for the cover of the tents and instead of פְּרִי the reading was עַלְיָן הַרְדֵּן (not הַרְדֵּם 'myrtle,' as Ehrlich thinks, nor can I accept his פְּנָאָר 'branches,' instead of פְּרִי). The Talmudic authorities have no longer any comprehension of פְּרִי הַרְדֵּן and do all sorts of guessing. Our Ethrog is really the Persian Othirang, which is our orange; while Josephus (*Ant.* 3. 10. 4) and LXX seem to think of a peach instead of a citron. The prophet Zechariah, or rather the author of the fourteenth chapter, which belongs to a very late date, gives us an insight into an altogether different and yet archaic character of the harvest feast of Sukkoth, when he describes it as a feast of rain which is to bring its fertility to those nations who come to Jerusalem for the celebration of the feast, and the

blessing of which is to be withheld from the nations who do not come to bow down before the One and Only God of Israel in Jerusalem. Obviously we have here an ancient water festival, traces of which are found also in Is. 12. 3 and 30. 29. It is called in the Mishnah *Sukkah* (5. 1) *Simhath beth ha-shoebah*, 'Festivity of the House of the Water-drawing.' It consisted of a procession from the Shiloah Spring to the temple made by large crowds following the priest with his chalice of water for the water libation at the altar, and was preceded by dances during the whole night of each day of the Sukkoth festival, amidst the play of instruments and the carrying of torches, in which especially 'the Hasidim and the Wonderworkers' (*anshe maasch*, probably the Essene 'rain-makers') took a prominent part. It closed with the beating of the willows—*hibbut arabah*—at the close of the feast (*Sukkah* 4. 1—6, cf. Ps. 118. 27). The Sadducean priesthood, however, opposed it (*Sukkah* 4. 9; *Tosefta Sukkah* 3. 1, 16). The ceremony was connected with the belief in the water foundation in the depth of the world's center as placed beneath the Temple mountain of Jerusalem (see *Sukkah* 53 a, b), a belief still shared by the people, Jew and Christian, and it reaches far back in ancient Semitic life, as has been shown by Feuerthwang, *Das Wasseropfer u. d. verb. Ceremonien*, 1911 (cf. Sepp, *Jerusalem*, Index, s. v. Siloa).

The name *Azereth* in Lev. 23. 36 and Num. 29. 35 for the last day of the festival gathering seems rather to denote 'Conclusion Feast,' as is shown in Deut. 16. 8, and as Tradition has it, which gave to the Feast of Weeks as the ending of the seven harvest weeks also the name *Azereth*, Aram. *Azaria* (*Rosh ha-Shanah* 1. 2; *Hagiga* 2. 4; Josephus, *Ant.* 3. 10 b).

These three festivals were adopted from the Canaanites as agricultural feasts, and, no doubt, celebrated originally in the various sacred localities according to the ancient custom, while the annual pilgrimage feast at the end of the agricultural year (Ex. 23. 16; 34. 22) was at an early date made an especial season of gathering at the main Sanctuary of Shiloh (Ju. 21. 19; 1 Sa. 1. 3).

THE NEW YEAR'S DAY

The other two festivals ordained in the Priest Code (Lev. 23. 23—32; Num. 29. 1—11) have in my opinion not been satisfac-

torily explained as to their origin and meaning. The priest-prophet Ezekiel seems to have taken cognizance in his festal system (45. 18—25) of the double calendar existing already in ancient Palestine as well as in Babylonia, the agricultural one beginning in the fall (see Ezeck. 40. 1) and the sacred or official one beginning in the spring (2 Sam. 11. 1; 1 Ki. 20. 22; Jer. 36. 9, 22). Accordingly he proposed an Expiation for the Temple on the first of the *first* month of the sacred calendar and another on the first of the *seventh* month (בִּשְׁבִיעֵי כָּחֶד לְחֶרֶב). This is the reading restored after LXX by Cornill, Smend, and Wellhausen. As was seen already by Ewald, the Priest Code has, in accepting the agricultural calendar beginning the year in the spring, made it its object to build the whole system of Jewish life on the holiness of the number Seven, according to which the seventh day of the week, the seventh month of the year, and again the year following the seventh time seventh year as the Jubilee year should be holy unto the Lord. Accordingly the New Moon of the seventh month, being the Sabbatical month following the six months of agricultural labor, was, in distinction from the New Moon of any other month, which was always ushered in by the blowing of trumpets (Num. 10. 10), to have a more sonorous blast by the Shofar, and therefore it is called a day of memorial by blowing the horns (Lev. 23. 24; Num. 29. 1), whereas the first day of the first month of the year has nothing specific as the year's beginning. The rite of expiation of the Temple, however, is transferred from the first (on which day Ezekiel has it, 45. 20) to the tenth of the seventh month. The reason for this must be sought in the fact that this was the ancient solar New Year's day, as Ezekiel has it in 10. 1, and because the Jubilee year was according to the later legislation to begin on this day (Lev. 25. 9—10). It was only with the introduction of the Babylonian system of the months that the first of Tishri, which denotes 'the month beginning the year,' *Tasritu* (see now Jastrow's highly interesting article 'Sumerian and Akkadian Views of Beginnings,' *JAOS* 36, 274—299, esp. p. 298, n. 62), became in the Jewish liturgy the New Year's Day, while it was a subject of the controversy between R. Eliezer and R. Joshua of the second century whether on the first of Nisan or of Tishri the creation of the world or of man took place (*Rosh ha-Shanah* 10 b-11 a). Possibly the important event recorded in

Neh. 8. 2 ff. of the introduction of the book of the Law by Ezra at the festal gathering on the first day of the seventh month, marked as especially 'holy,' had some influence on rendering this day a great memorial day for the future. Still the day is characterized there as one of joy and social festivity, not of a serious nature such as the New Year's day became afterwards. Unquestionably, however, it was the old Babylonian New Year's day, celebrated originally in the fall at the beginning of the seventh month Tishri (corresponding also with the seventh month of the Persian calendar named after Mithras), on which Bel Marduk or his predecessor, as the supreme deity of Babylon, sat in the mystic chamber of the fates to determine from the book of life the destiny of mankind for the coming year;¹ which gave the Jewish New Year's day its serious character as the day of divine Judgment on which the Creator and Judge of the world assigns to all men their destiny according to their merits or demerits each year, inscribing the same in His book or books of life, finally to seal it on the Day of Atonement.

THE DAY OF ATONEMENT

The great Day of Atonement, celebrated on the tenth day of the seventh month, which forms the culminating point of the Temple worship of the year, called like the Sabbath, 'a Sabbath of complete rest,' Lev. 16. 31, has a unique character among the Jewish festivals. While obviously unknown as yet in Ezra's time (Neh. 8), not to speak of the Solomonic time (1 Ki. 8. 65), it soon became during the second Temple 'the great Day' of the year and afterwards the most solemn holy day of the Synagogue. To account for its origin and meaning it is not sufficient to point to Ezekiel's proposed system, according to which the first day of the seventh month was like that of the first month to be a day of expiation of man's sin and of atonement for the temple (Ezek. 45. 20), and simply to assume that the author of the Priest Code transferred it to the tenth day in order to have the New Moon of the Sabbatical month stand out as distinguished from the other New Moons of the year. We have also to consider

¹ See Jastrow, *Religion of Babylonia and Assyria*, p. 67—69, especially p. 68; Schrader-Zimmer, *K.A.T.* p. 402 f., 514 f.; Alfred Jeremias, *Das Alte Testament im Lichte des alten Orients*, p. 43, 357, note 3.

the fact that the tenth of Tishri is called by Ezekiel (40. 1) 'the beginning of the year,' and that the Jubilee year was actually to be proclaimed by the blowing of the horn as holy on the Atonement day, the tenth of the seventh month, which implies that the year began on that very day (Lev. 25. 9—10). It is obviously the solar year, in contradistinction to the lunar year, the beginning of which was to be marked according to the system recognized also in the story of the Flood (see Gen. 8—9, cf. 7. 11), where the difference is also one of ten days.

Here, then, the question arises whether it is likely that the strange rites prescribed in Lev. 16, which placed the Azazel, the demon of the wilderness, in some sort of opposition to Yahwah, the Only One God of Israel, were introduced as an innovation during the second temple at a time when the religious spirit of the people and the priesthood was scarcely susceptible any more to the worship of the goat-like deities, the Seirim (= satyrs) against which ch. 17. 7 warns. It was Ibn Ezra in his commentary to Lev. 16. 8 who saw the relation of the Azazel to those demons 'of the field.' But we know from the book of Enoch, written in the second pre-Christian century, what an important role among the demons Azazel played. The Masoretic writing 'אַזָּזֵל' was introduced to give the name 'אַזָּזֵל' as found in Mandaeen, Sabaean, and Arabian mythology (Norberg, *Onomasticon*, p. 31, Brand, *Mandaeische Theologie*, p. 197 f.) the meaning of a 'rugged place,' (*Sifra* ad loc.; *Yoma* 67 b) instead of a 'wilderness deity.' The very spot in the neighborhood of Jerusalem, the sharp rocks (Beth Hadude) where the scapegoat was to be cast down to Azazel according to the Mosaic Code (*Yoma* 6. 8), was regarded as the place where the demon was cast down by the angel Raphael there to remain shackled in the darkness until Judgment Day (*Enoch* 10. 4—5; see Charles, ad loc.). In other words, Azazel was in the popular belief the head of the demons whose dwelling was in the wilderness around Jerusalem. The sending out of the scapegoat to him laden with the sins of the people was originally, then, the cleansing of the people of all impurity in order to secure their welfare for the year just begun. It was an ancient rite dating from primitive time, to be compared with the rite concerning leprosy (Lev. 14. 7), which has its analogies also in Babylonian rites (see Sayce, *Hibbert Lectures*, 1887, p. 461), and in all likelihood the

festal dance of the maidens on the hills of Jerusalem assigned in the Mishnah *Taanit* 4. 8 to the Atonement day and the fifteenth of Ab (August), reminding one very much of the dance of the maidens at the sanctuary of Shilo (Ju. 21. 21), was connected with the celebration of the solar New Year's day (cf. Morgenstern *JAOS* 36. 324 f.). The signals informing the people of the arrival of the scapegoat at its destination, the Azazel rock (*Yoma* 6. 8), seem to have been the inducement to open the dance on the hills.

Now it is rather strange that the date for the Atonement Day is not given at the beginning of the chapter, but in v. 29, which together with v. 30—31 did not belong to the original text. Possibly the whole law underwent changes as to date and contents. As a matter of fact the chapter is composed of many sources, as was shown by Benzinger and others (see Berthelot and Driver *ad loc.*). From a popular New Year festival it was transformed by the author of the Priest Code into a day of great pontifical function, and the final redactor of *Leviticus* in inserting v. 29—31 rendered it a Day of Atonement for the people. Later on the Pharisees invested it with a still higher or holier character in rendering it a day of prayers for repentance as well as fasting, a day of divine mercy on which the thirteen attributes of God (Ex. 34. 6—7) revealed to Moses were brought home to the people as assurance of the divine forgiveness. They went even so far as to refer the words: *Ki bayom hazeh yekapper*, 'on this day he shall atone,' not to the priest but to God, who shall, through the day, have atonement for the people (*Sifra* to v. 30). Thus the whole idea of sacrificial worship on the Atonement Day, on which the Epistle to the Hebrews (c. 9) and Barnabas (c. 7) base their doctrine of Christ as the world's Atoning High Priest, was replaced by the prayers and litanies of the 'great day.'

THE TRAVELS OF EVLIYA EFFENDI

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A comparatively small amount of material has been translated from Turkish into English and published. The Latin, German, and Italian, and even the Hungarian and Danish languages have all received considerable portions of the early Ottoman historical writings, of which English shares with French the defect of having received very little. A number of poems and humorous stories, and some longer stories, have been translated into English, often too freely to give a correct impression. E. J. W. Gibb has published an extensive anthology of Ottoman poetry.¹ But were it not for *The Travels of Evliya Efendi*, there would exist, I believe, no single sizable piece of Englished Turkish. This translation, furthermore, while probably corrected by an Englishman, was made by an Austrian German, the great Orientalist Joseph von Hammer.² Curiously enough, though doubly incomplete, it contains, I believe, in the 350,000 words of its 676 folio pages, the longest work that has been translated out of the Turkish, except possibly Fluegel's translation into Latin of Haji Khalfa's annotated bibliographical dictionary.³ *Evliya*

¹ E. J. W. Gibb, *History of Ottoman Poetry*, ed. E. G. Browne, 6 vols., 1909—.

² *Narrative of Travels in Europe, Asia, and Africa in the Seventeenth Century*, by Evliya Efendi. Translated from the Turkish by the Ritter Joseph von Hammer (Oriental Translation Fund). Vol. 1, pt. 1, xviii + 186 pages; pt. 2, iv + 256 pages; vol. 2, v + 244 pages. London, 1846—1850.—The translator has provided an introduction, tables of contents, and about 50 notes, but no index. The 'Advertisement' bears the date Jan. 20, 1834, showing that the translation was completed before that date. It is not known what assistance, if any, von Hammer had in the preparation of his translation.—All subsequent references without titles are to the volumes and parts of this work.

³ *Lexicon Bibliographicum et Encyclopedicum*, a Mustafa ben Abdallah Katib Celebi dicto et nomine Haji Khalfa, edidit, latine vertit, et commentario indicibusque instruxit G. Fluegel, 7 vols., Leipzig, 1835—1853.

seems to have fallen far short, from the chronological point of view, of writing a narrative of all the travels and adventures of his forty or fifty active years, but he has largely compensated for this by including so great a part of all he knew or could learn about things in general. His work contains, besides its central motive, an autobiography of the author, a sort of guide-book to Constantinople and the Levant, a broken sketch of Ottoman history from the beginning to about 1676, no small quantity of unreliable statistics, a description of the administration of the Empire in the time of Suleiman, a lively enumeration of the 'thousand and one' trade-gilds of Constantinople, and a wealth of anecdotes, legends, and observations.

Evliya lived from 1611 until about 1680,* and thus witnessed most of the period of high and perilous equilibrium in Turkish history which stretched from the peace of Sztvatorok in 1606, when Austria ceased to pay tribute for her holdings in Hungary, until the year 1683, when the second failure of the Turks before Vienna initiated their long and incomplete retreat southeastward. All that is known of his life is to be found scattered piecemeal through his narrative. If his own story be accepted without question, he was descended from great men of the time of Sultan Orkhan and even of the Caliph Harun ar-Rashid.[†] His great-grandfather, Yawuz Ali Usbek, had been Mohammed II's standard-bearer at the conquest of Constantinople.* Rewarded with an estate in the city, he built on it one hundred shops, and then by good Ottoman custom bestowed it upon a mosque as an endowment, in such a way that his descendants would always be

* I. 1. 110: 'I, the humble writer of these pages . . . was born on the 10th of Moharrer, 1020 [A. H.].' Kara Mustafa is mentioned as grand vizir (I. 1. 156), which position he held from 1676 until his execution after failing to take Vienna, in 1683. If the number 51 be correct for the years of Evliya's active life (I. 1. 174), this would equal about 49 Christian years, and, added to 1631, would bring him to 1680.

† I. 1. 35, 36. Evliya claims descent from Sheikh Ahmed Yesevi of Khorasan, who sent his disciple, the famous Hajji Bektash, to Sultan Orkhan; and from Mohammed Hanifi, whose son Sheikh Jafar Baba was sent as ambassador to Constantinople by Harun.

* I. 2. 48. The burying-ground of Evliya's family was at Kasim Paşa, behind the Arsenal. Here lay his father, his grandfather Timurji Kara Ahmed, his great-grandfather, and many other relatives.

administrators and entitled to a share of the income.⁷ Eviya's father, Dervish Mohammed Zilli, had been the great Suleiman's standard-bearer, and was for an unbelievable number of years head of the gild of goldsmiths of Constantinople.⁸ This very numerous organization enjoyed special imperial favor, since Selim I and Suleiman, following the practice by which every prince of the Ottoman house must learn a trade, had been apprenticed as goldsmiths (1. 2. 188). Eviya's mother had been a Circassian or, more strictly, an Abaza slave girl.⁹ Her brother Malik Ahmed rose as slave-page in the palace through various offices of government, until he became grand vizir of the empire and was honored with the hand of the Sultan Murad IV's daughter.¹⁰ The help and influence of this highly successful adventurer accomplished much for his nephew, who was less ambitious and important, but freer and happier.

The comprehensive character of Eviya's book is related to a remarkable breadth of experience. The offspring of a freeborn man of ancient Moslem lineage and a slave woman from the rough mountains of the Caucasus, he was educated according to standard Moslem fashion along the road which led to the high positions in religion and law, but he also had opportunities to mount a certain distance in the government service, which was gradually departing from the rule according to which its higher

⁷ 1. 1. 21. Eviya's book gives many references to the numerous Ottoman religious endowments; see for example, 2. 91. For a brief discussion of the subject see my *Government of the Ottoman Empire in the Time of Suleiman the Magnificent*, p. 200-203.

⁸ 1. 1. 39, 141: 'Praise be to Allah, that my father was the chief of the goldsmiths from the time of Sultan Suleiman to that of Sultan Ibrahim.' The former died in 1566; the latter ascended the throne in 1640.

⁹ 1. 1. 152. Her father, an Abaza, was the *Kiçya* of the *Kapuçis* (superintendent of the gatekeepers) of the important man Ordanir-Oghlu Osman Pasha. She and her brother Malik Ahmed were sent to the home country for what was considered a better bringing-up (1. 2. 61), and when the brother was 15 years of age they were brought back and presented to Sultan Ahmed, who took the boy into the page school of the palace and gave the girl in marriage to Eviya's father.

¹⁰ 1. 1. 118, 132, 162; 1. 2. 13. This lady, whose name was İsmahan Kın, died in childbirth in 1651, at the age of 27. Malik Ahmed served as governor in a remarkable number of provincial capitals, including Diarbekir, Buda-Pest, Cairo, and those of Bosnia and Rumelia, both before and after his term as grand vizir.

positions were open only to those who had begun life as Christian slaves.¹² In addition to this, Evliya was trained in his father's profession as a goldsmith, and so had a definite place in the economic organization of the empire (1. 2. 189). Although he seems never to have been married, he was far from indifferent to the beauty of women, or, indeed, of boys.¹³ He became initiated as a dervish into one of the many mystical religious orders (1. 2. 93 ff.), but he also spent much time in the gay life of a well-to-do young man about town (1. 2. 246; 2. 28). He passed through all of this as 'a poor, destitute traveler, but a friend of mankind' (1. 1. 2), and, as he himself says, being 'of a vagabond Dervish-like nature' (2. 28), he entered all doors but took up a fixed abode nowhere.

In his formal education he studied seven years in the Madressah of Mufti Hamid Effendi, one of the numerous endowed colleges of Constantinople (1. 2. 37). Here he heard the general lectures of Akhfaş Effendi, and he mentions gratefully the names of three of his teachers, and in particular that of Evliya Mohammed, after whom he was probably named.¹⁴ 'Evliya' means 'saints,' and perhaps it was the accident of his name that led him to become a traveler, eager to visit the tombs of Moslem saints. He describes, however, a picturesque dream in which in the mosque of Akhi Chelebi he saw the Prophet Mohammed and was given a commission to travel through the world and visit the tombs of holy men.¹⁵ He was then just twenty-one years of age, and desired, he says, 'to escape from the power of my father, mother, and brethren' (1. 1. 1). His first journey was confined, however, to a thorough and detailed inspection of his native city and its environs¹⁶; not for ten years did he venture a longer

¹² This rule is discussed in my *Government of the Ottoman Empire*, p. 45 ff. The education for religion and law is described on p. 203 ff.

¹³ See his descriptions of the inhabitants of various towns, 2. 128, 144, 149, 196, etc. For example: 'The beautiful youth of both sexes at Meraghi are everywhere renowned.'

¹⁴ 1. 2. 33: Sheikh Hédiyi Mohammed Effendi 'adopted me as his spiritual child'. In 1. 1. 32, 137 Evliya shows his reverence for the elder Evliya.

¹⁵ 1. 1. 2—4. Evliya's book mentions the tombs of hundreds of Moslem saints, whose final resting-places he sought out at every opportunity.

¹⁶ The description of this, with much other material intermingled, occupies his first volume (which is also that of the translation, including parts 1 and 2).

flight for the sole purpose of travel. Meantime he accompanied his father on the military expedition to Tabriz in the year 1635 (1. 1. 129 f.). His education had not ceased, and its last period, though the picturesque account is open to the suspicion of being overdrawn, was of exceptional character. Small of stature and of youthful appearance, he was possessed of an attractive voice, and had learned to sing, accompanying himself with various musical instruments; and to intone the Moslem call to prayer, read the Koran, and lead prayers in the most approved fashions.¹⁰ In the same year 1635, on the Night of Power, when Santa Sofia was filled with reverent worshipers, and Sultan Murad IV himself was present in his private box, Evliya, by the advice of his father, and very probably with the collusion of his uncle, who then held the high office of sword-bearer, took a place on the seat of the muezzins, and at a suitable time, began to chant the Koran. The impression which he made on the Sultan resulted in a summons to the palace and an adoption into the corps of pages.¹¹ Though Evliya claims that he told the Sultan he knew seventy-two sciences and was acquainted with 'Persian, Arabic, Romaic, Hebrew, Syriac, Greek, and Turkish' (1. 1. 133), nevertheless he was given a series of text-books and assigned regular lessons (1. 1. 137). He claims to have 'enjoyed the greatest favor' of Murad (1. 1. 138), and certainly he showed through his life a special attachment and loyalty to him. Before the great expedition to Baghdad in 1638, which secured that city to the Turks 'unto this day,' Evliya had been graduated from the palace school, and made a *spâhi* or cavalryman, with a high salary.¹² It would seem, however, that he did not go on that

¹⁰ His small size is revealed in 1. 1. 134, 139. He served for 3 years as reader in the mosque of Salim I (1. 2. 6) and frequently afterward as Muazzin.

¹¹ A sprightly account of his life in the palace is given at 1. 1. 132—142. In previous times he would not have been allowed to remain more than a year, since pages were 'graduated' at twenty-five years of age. Hammer states erroneously that Evliya remained in the palace only a short time and then went on the expedition to Erivan (1. 1. iv). He went to Erivan first (1. 1. 129—131). The Sultan returned to Constantinople on the 19th of Rajab, and Evliya entered the palace in Ramazan, two months later. He remained about three years, it appears.

¹² 1. 1. 141—142: 'Previously to his Majesty's undertaking the expedition to Baghdad, I left the imperial Harem, and was appointed a *Spâhi*,

campaign, and that for some unstated reason he left the permanent public service before the year 1640.

Evliya's first independent trip for travel was made in the year last mentioned, to Brusa (2. 1 ff.). With this began his series of journeys out from Constantinople and back, by which in the course of half a century he saw most of the lands of the empire, and especially Asia Minor, the shores of the Black Sea, and the Balkan peninsula.²⁰ Nor did he omit the pilgrimage to Mecca, and he saw Egypt and Syria by the way.²¹ He also passed the frontiers and visited northern Persia and Russia,²² while his longest single journey was one of three and a half years in Western Europe, in the years 1664-1668.²³ It is particularly to be regretted that he left no account of this journey, for his view of the infidel countries written for the edification of the faithful would be both amusing and instructive. Some of his journeys were taken under military orders, as by sea to Crete in 1645²⁴ and to Dalmatia a little later.²⁵ Summing up his adventures, he says that in his life he was present at twenty-two battles (1. 2. 57), saw the countries of eighteen monarchs, and heard one hundred forty-seven languages.²⁶

Evliya adorns his narrative with some book knowledge, includ-

with an allowance of forty aspers per day.' If this figure be correct, Evliya received a salary with which he was expected to bring into service, when needed, three or four cavalrymen besides himself.

²⁰ The second volume describes in detail his circuit of the Black Sea and his travels in many regions of Asia Minor and the adjacent portions of Persia. The first volume contains brief allusions to his journeys through most parts of European Turkey.

²¹ The account of this journey is lost; see below, p. 239.

²² 1. 1. 164. He traveled 70 days in Russia in the year 1668.

²³ 1. 1. 163. He visited Vienna, Dunkirk, Denmark, Holland, Sweden, and Poland. 'In the year 1668, on the night of the Prophet's ascension, I found myself on the Ottoman frontier, at the castle of Toghan-kechid, on the Dniester. Conducted by my guides, who were Komaks [Cossacks], I saw lights in the minaret, and, for the first time, after so long an absence, I heard the sound of the Mohammedan call to prayer.'

²⁴ 2. 74 ff. Evliya is a valuable first-hand authority for the history of this expedition.

²⁵ 1. 1. 149. Evliya says that he was then in one of the Janissary companies, a statement not easily to be reconciled with his claim to have been in the superior position of *Spahî* of the Porte seven years earlier.

²⁶ 1. 1. 174; 1. 2. 99. Evliya attempts, at 1. 1. 11-12, to give the name of Constantinople in 23 different languages. Some of the forms are cor-

ing allusions to the ancient literature of Arabia, Persia, Islam, and even Judaism and Christianity.²⁴ Yet from the fact that he went no farther in the religious school system, he does not seem to have possessed an exceptional order of intellectual excellence. It was probably a serious trial to his father that he failed to utilize any of the brilliant opportunities that were before him in business, the army, the government, the law, or the church. He did, however, finance many of his travels by utilizing portions of his training in these various directions.²⁵ He was evidently quick-witted, well-mannered, shrewd, and resourceful. Though so fond of good company, he insists strenuously and repeatedly that, like his father before him, he never tasted forbidden drinks. 'I, who spent so much time in coffee-houses, *buzza*-houses, and wine-houses, can call God to witness, that I never drank anything during all my travels but this sweet *buzza* of Constantinople preserved in boxes; that of Egypt made of rice-water, and that of the Crimea, called *makesama*. Since I was born, I never tasted in my life of fermented beverages or prohibited things, neither tobacco, nor coffee, nor tea, . . . nor wine, . . . nor beer,' and so on to no less than sixty-eight items.²⁶ Can it be that he 'doth protest too much'? He recognized as prevalent and deplored other Oriental vices, but in this regard he made no affirmation of innocence, and indeed, laid himself distinctly open to suspicion.²⁷ At the same time, not only is there a religious ingredient in his work from beginning to end,

rect, as the German *Konstantinopel*, while others are clearly inaccurate; the 'Africans' name is said to be *Ghienandwyych*, which seems to be a representation of the French *Grande Ville*.—In this connection may be mentioned the visitors to the Mosque of Suleiman (1. 1. 81), who in the picturesque account of their visit are related to have exclaimed 'Maryah, Maryah'; this may have been *merveilleux*, and if so, the visitors were presumably French.

²⁴ These allusions, too numerous for citation, are especially frequent in regard to literary, Biblical, and early Moslem personages.

²⁵ For example, he was *mazriza* on the admiral's ship for the expedition to Azov in 1641 and for that to Crete in 1645; he went to Erzerum a little later as *mazriza* of the Pasha and clerk of the custom-house, etc. (2. 59, 77, 78).

²⁶ 1. 2. 246. Eryiya makes positive denial also at 1. 2. 54; 2. 139. The latter forms part of a most interesting description of his entertainment by a Persian governor.

²⁷ See the allusions at 1. 2. 34, 85; 2. 12; etc. The prostitutes in Constantinople in his time were boys, not women (1. 2. 53, 109).

but piety appears to be no extraneous and superadded feature of his character.²⁰

For us of to-day who desire to learn from him about his people and his times, the questions of accuracy, veracity, and critical judgment are of great importance. In all of these respects credit can be given him for good intentions and sustained efforts, but in none can it be affirmed that he is *unimpeachable*. In general, he has the tendency frequent in Orientals, to substitute an exaggerated estimate for patient laborious calculation, he is not uninfluenced by a desire to exalt his own knowledge and achievement or to give point to a story, and he is credulous as regards such matters as the deeds of saints and the longevity and the adventures of ancient and garrulous campaigners. It is then not to be expected that his book would possess the calm, judicial, meticulously accurate, and designedly uninteresting character of the ideal work of a scientific historian. It is in fact a very human document. He called his city a 'mine of men' (1. 1. 23), and his book is primarily a mine of information about men. After all due criticism has been made, a great deal of illumination is thrown by it upon the social customs, habits of business, modes of thought, and life experiences of the seventeenth-century peoples whom he knew and visited, and particularly upon his fellow-Osmanlis. The persons whom he introduced in profusion, by masses, groups, or individuals, are all alive, active, and dynamic, whether officials high or low, townsmen or villagers, tradesmen or sailors, priests or soldiers. With a different training, Evliya might have become a *Balzac* or an *Arnold Bennett*, a *Prescott* or a *Macaulay*.

Evliya states that he began to write his travels in his twenty-second year, at the time when he first resolved to become a traveler (1. 1. 5). Nevertheless the work bears evidence that even the first and fullest portion, the elaborate description of Constantinople which occupies nearly two-thirds of the published translation, was composed in the later years of his life, probably in his seventh decade, after his travels had come to an end.²¹

²⁰ Such seems a fair inference, not merely from the frequent formulas and affirmations of a religious character, but also from Evliya's turning to prayer in times of danger and special rejoicing.

²¹ References to many years of his experience are scattered through his first volume. See note 4.

It is likely, however, though positive proof is lacking except in a few instances, that he gathered materials in the form of notes of his own, and fragments and works of others, during all the active years of his life.⁵² Unless he possessed an extraordinary memory, the precise statements which he makes presuppose extensive written support, for he has carried out well what he affirms to have been his original commission: 'Thou shalt travel through the whole world, and be a marvel among men. Of the countries through which thou shalt pass, of their castles, strong-holds, wonderful antiquities, products, estables and drinkables, arts and manufacures, the extent of their provinces, and the length of the days there, draw up a description which shall be a monument worthy of thee' (1. 1. 4).

The historical narratives which are distributed through the book, associated often with the mosques and tombs of Sultans, are, apart from those of his own lifetime, a mixture of truth and error, in such a way as to indicate a combination of oral tradition and written record, modified occasionally by a native untrained criticism. An illustration of his historical offering may be condensed from his story of Constantinople, which he claims to have taken in part from the Ionian history (the 'history of Yanvan') read to him by his Greek friend, Simeon the Goldsmith.⁵³ King Solomon, who was a Moslem, was the first of nine builders of the city. Alexander the Great, the 'Two-horned,' was the fourth. He it was, furthermore, who cut the channel of the Bosphorus between the Black and the White (or Aegean) Seas (1. 1. 13, 14).⁵⁴ Puzantin, King of Hungary, evidently the eponymous

⁵² He mentions: the historical work *Tohfet* (*Tuhfat*), 1. 1. 9; the 'history of Yanvan [Ionia!]', 1. 1. 27; the title deeds to his ancestral lands, 1. 1. 31; the statistical *Kasih-nâmah* of Suleiman I, 1. 1. 88—105; a description of Constantinople in the time of Murad IV, from which he extracted a summary, 1. 2. 44, 100, 104; the constitutional laws of Sultan Suleiman, 1. 2. 59; the constitutions of the different orders of dervishes, 1. 2. 100; the description of Constantinople by Molla Zekeria Efendi, 1. 2. 102.

⁵³ 1. 1. 27. Either Simeon or Eviya introduced many things which could not have been found in a Greek history.

⁵⁴ 1. 2. 72: 'This is the canal which was cut by Iskender Zulharnin to unite the Black and the White Seas. The traces of this work are even now to be seen on the rocks.'

Greek founder Byzas, instead of being the first founder was the fifth. Constantine the Great instead of second was ninth. Evliya is not quite clear as to the distinction between the first Constantine and the last, for he says that Constantine planted eleven hundred cannon to defend the city, so that not a bird could fly across without being struck, a statement which, aside from double exaggeration, is of course anachronistic even for the thirteenth Constantine. Having been besieged nine times by the Saracens, half the city was surrendered to Sultan Bayazid I, and finally the whole was taken by Mohammed II the Conqueror. At this point is introduced an interesting and characteristic episode (1, 1, 37—43). During the siege twenty relief ships came from France and were captured by the Turks. On one of them was a daughter of the King of France, who grew up to become the cherished consort of Mohammed II and the mother of Bayazid II. Now Evliya very clearly had doubts about this story, but they were resolved in the following way. As a boy he knew an aged friend of his father's, named Su-kemerli Koja Mustafa. 'He was,' says Evliya, 'a most faithful man, and one whose word could be taken with perfect security' (1, 1, 39). Su-kemerli related that he was himself a nephew of the French princess and had been five years old at the time of the taking of Constantinople. Evliya quotes him again as having been 'when a youth of twenty-five years of age, present at the conquest of Cairo by Sultan Selim I.'¹² But if his former statement could have been true, he would have been sixty-nine instead of twenty-five years of age in 1517. Not only does Evliya overlook this discrepancy, but he finds nothing difficult in the conclusion that in order to tell these romances to him in about the year 1620, Su-kemerli must have been about one hundred and seventy years of age! Evliya can affirm that his own father was present in 1521 at the capture of Belgrade, and yet lived until 1648!¹³ Such claims

¹² 1, 1, 39. See von Hammer's attempted correction of this, 1, 1, 184, note 7, where he errs in his calculations by three years and is apparently not at all surprised at the extraordinary age of Su-kemerli Mustafa.

¹³ 1, 1, 39: 'My father . . . was with Sultan Suleiman at the sieges of Rhodes, Belgrade, and Szigetvar.' Mohammed Zilla died in 1648 (2, 240). The great architect Sinnen is said to have lived to 170 years (1, 1, 171). See also 1, 1, 46, 60, 153.

have not often been made since the days of the Biblical patriarchs. One can imagine the ancient veterans swapping yarns, which grow with the telling, while the young Evilya, reverently repressing the tendency to doubt, stores all up in his retentive memory. But such credulity impairs for us his value as a historian, at least of times before his own. Still, judging from his general tone and occasional affirmations, he endeavored to state the truth as nearly as he could ascertain it. He wishes, he explains, 'not to incur the tradition of liars, which says: "A liar is he who relates everything he hears"' (1. 1. 63; 1. 2. 21).

He corrects a historiographer's statement as to the place of Selim II's death (1. 2. 10), and observes that whereas there is shown in Santa Sofia the stone trough in which the newly born Jesus was washed, he saw the real one at Bethlehem (1. 1. 65). But he hastens to affirm as 'known to all the world,' that 'crooked and sickly children, . . . when washed in the trough in Aya Sofiyah immediately become straight and healthy, as if revived by the breath of Jesus.' In his travels generally he is scrupulous in avoiding the attempt to describe what he himself had not seen.²¹ In his historical statements likewise he appears to have applied such criticism as he was capable of²² and in general to have reproduced the standard view of the past as accepted by the learned Turks of his time.²³ Neither the beliefs set forth above as to Constantinople's early history nor the tradition about the French princess is confined to Evilya's work alone.

He was an especial admirer of Sultan Murad IV, to whose household he belonged for a time. Some of his anecdotes deline-

²¹ 2. 67. At 1. 2. 132—133 there is a story of a man, a crocodile, and a fish, which is evidently more than Evilya wishes to accept, though he was confronted with witnesses; he likens the experience to that of Jonah. At 1. 1. 60—61 is another tale as to which it is well said, 'the proof of it rests with the relator.'

²² A curious use of criticism is found at 1. 2. 3, where the tradition that Bayazid II died and was buried twice is corrected by the explanation that his soul once yielded to the temptation to eat animal food and crept out of his mouth in the form of a living creature; he prevented its re-entrance and had it beaten to death; later, by decision of the Mufti, it was given decent burial.

²³ Evilya was more credulous on the religious side than elsewhere. He believed almost anything related of a saint; see, for example, 2. 70—72.

ate the peculiar character of this monarch, and reveal the child-like but dangerous impulsiveness that unlimited authority may develop. The Sultan possessed immense strength, even though one can not believe with Evliya that he once buried a javelin a mile.¹⁶ No wrestler could open his clenched fist. On one occasion Evliya advised him after vigorous exercise and a Turkish bath not to wrestle any more that day. Said the Sultan, 'Have I no strength left? Let us see,' and taking Evliya by the belt, he raised him above his head and swung him about for a long time, until he begged for release. Then the Sultan put him down, and gave him forty-eight pieces of gold for consolation (1. 1. 139). On another day Murad, sitting in the garden of Dolma-Baghecheh, was reading a new satirical work by the poet Nefi Effendi, 'when the lightning struck the ground near him; being terrified, he threw the book into the sea, and then gave orders to Bairam Pasha to strangle the author Nefi Effendi.'¹⁷

Evliya falls into a few anachronisms, as when he speaks of Prince Jem and Uzum Hasan as having flourished before the fall of Constantinople, instead of some time after (1. 1. 36). This is in spite of the fact that he expressly affirms his accurate knowledge of the dates of Mohammed II's reign, as obtained from the title deeds to his inheritance (1. 1. 31). Another anachronism illustrates also his credulity. At his father's suggestion a building that was believed to be a thousand years old, situated near Santa Sofia, was opened up in order to become the tomb of Sultan Mustafa I. Says Evliya: 'While the windows were being cut in the walls, a tobacco pipe was found among the stones, which smelt even then of smoke; an evident proof of the antiquity of the custom of smoking' (1. 2. 12). It is interesting to notice that Evliya understood the use of a telescope and had probably looked through one (1. 2. 50).

¹⁶ 1. 1. 140. Evliya states that Murad, standing in the courtyard of the Old Palace, brought down a crow from the minaret of the Mosque of Bayazid II, one mile distant. He says that the spot where the crow fell was marked by a white marble column inscribed with a chronogram. Possibly the translator, having in mind the principal palace on Seraglio Point, inserted the words 'one mile distant' erroneously. The Eski Sarai of Mohammed III was much nearer than one mile to the mosque of Bayazid II.

¹⁷ 1. 2. 63. See also the incident of the astronomer's well, 1. 2. 60. The pursuit of literature and science was hazardous in the time of Murad IV.

The Orient has seldom been inclined to count exactly and estimate accurately, and in its records enormous exaggerations are possible. Eviya's figures are subject to this tendency, even when quoted from documentary evidence said to have been obtained with great care. He had before him, he says, an enumeration with descriptions of all the buildings of Constantinople, made exactly and completely for Sultan Murad IV in the year 1638 (1. 2. 103). The summary contains the following figures: 'Great mosques of the Vezirs, 1985, small mosques of the wards, 6990, . . . primary schools, 1993, . . . caravansarais, 997, . . . baths, public and private, 14,536, . . . fountains, public and private, 9995.' Now it is clear that in many of these instances, a round number was guessed, ordinarily about ten times too large, as 2000, 7000, 1000, 10,000, and then a slight change was made to make the estimate seem to be the result of counting. Eviya says again that Suleiman's mosque cost 890,883 *yuks*, which von Hammer values at 74,242,500 piasters, equal to about as many dollars, an incredibly large sum.⁴²

If Eviya's historical facts and his figures are unreliable, there yet remains much that is of importance and interest. After the description of the mosque of Suleiman is given a statistical survey of the empire in that Sultan's time, which was evidently copied from one or more written documents, with enlivening annotations from other sources (1. 1. 84—109). In this are included lists of great officials of the reign, the provinces and their *sanjaks*, the pay of the high officials, the number of feudal cavalrymen, and the conquests of Suleiman. A yet more extensive description, requiring some 80,000 words in the translation, is that of the procession of the gilds before the Sultan Murad IV (1. 2. 104—250). This is perhaps the outstanding feature of the book. Says Eviya: 'Nowhere else has such a procession been seen or shall be seen,' and he sighs with relief as he concludes: 'By the Lord of all the Prophets, God be praised that I have overcome the task of describing the gilds and corporations of Constantinople' (1. 2. 250). Participated in by two hundred

⁴² 1. 1. 81. The statement at 2. 65 that the Tartar Khan had 800,000 horsemen is an error of copying or translation, since the number 80,000 is mentioned in the previous sentence; this also is very probably an over-estimate. Likewise the statement at 1. 1. 145, that the Turkish fleet in 1605 had 11,700 vessels, is not Eviya's own, for his items add up to 1700.

thousand men, who were grouped into some seven hundred and thirty-five companies, this parade passed before the Alai Kiosk, where the Sultan sat, from dawn through the whole day until sunset. Its description gives an unexampled insight into the inner commercial life of Constantinople three hundred years ago. Evliya names the gilds in order, gives each its patron saint, tells the number of its members, and describes the exhibitions each presents. He also inserts many curious observations, as to the ordinary work of the gild members, related experiences of his own, notes from Moslem history, and occasional humorous remarks, anecdotes, and stories. An example may be taken from the account of the vinegar merchants: 'The number of men are one hundred and fifty. Their patron received the girdle from Ins Ben Malek, but I am ignorant of where his tomb is. . . . The oldest patron of the vinegar merchants is Jemshid, who having planted the vine at the advice of Satan, also made the first vinegar. Jemshid is said to be buried at Ephesus. They adorn their shops with large bottles, and roll along casks, crying, "Good excellent English vinegar." They have old casks of from seventy to eighty years' standing, wherein they put neither raisins nor anything else, but hot water only, which in three days becomes the best vinegar. Such casks cost an hundred piasters: in this manner the vinegar makers as well as the sherbet makers sell each drop of water granted to them by heaven.'⁴³

It is clear that Evliya possessed a very definite, if somewhat unpolished sense of humor. Elsewhere he says: 'Seven hours further on is the village of Karajalar, . . . three hundred houses of poor but very obstinate Turks: they will sell the trunk of a tree (for fire-wood) forty times over, putting it in the water every night, so that you may be compelled to lay out ten aspers in brushwood to set it on fire. A traveler marked one of these trunks by fixing a nail in it, and when he returned three years afterwards from the siege of Erivan they gave him the very same trunk.'⁴⁴

⁴³ 1. 2. 150. Among many other examples of humorous or picturesque description of gilds are those of the executioners, 1. 2. 108; the schoolboys, 115; the bakers, 120, 121, 126; the captains of the White Sea, 134—135; the dispute of the butchers and the merchants, 136—138.

⁴⁴ 2. 94. At 1. 2. 85 Evliya says: 'So famous are these meadows of Kisthanib, that, if the leanest horse feed in them ten days, he will resemble in

Now and then he manifests a naive and delightful, if not profound philosophy, as for example in his explanation of why there are so many sheep in the world: 'Although a sheep brings forth but one a year, yet are all mountains covered with them. Meanwhile it is a strange thing that dogs and swine have every year many young, so that one would believe that the world must be filled with them, yet God blesses the sheep because it gets up early and breathes the wind of divine mercy. The swine on the contrary turns up the earth with its snout the whole night, and sleeps during the day. The dog likewise barks the whole night, and in the morning with its tail between its feet lies down to sleep. Therefore the young of swine and dogs never reach a long life. This is a wonderful effect of the wisdom of God' (1. 2. 147—148).

Evliya's descriptions of travel are uniformly sprightly and lively. He narrates the experiences of his journeys, and in connection with each place of sojourn tells something of its appearance, size, history, the characteristics of its inhabitants, its fruits and products, gardens, defenses, buildings, its officers, their incomes, and the saints who are buried near.¹⁵ Not infrequently he repeats conversations and addresses, and he never hesitates to speak in the first person, yet always in a natural and inoffensive way. His style is regularly characteristic and individual.

It would be too much to ask of Evliya that he should provide serious and adequate reflections upon the institutions and the probable future of his country, for he is no political or social philosopher. The contemporary English observer Paul Rycaut, who could not equal Evliya in inside knowledge, possessed from the advantage of foreign birth a far superior objectivity of view.¹⁶ By combining the information given by the two with the

size and fatness one of the large elephants of Shah Mahmud [of Ghazni]. At the siege of Constantinople there were 40 ships 'filled with some thousand scarlet skull-capped Arabs, burning as brandy, and sharp as hawks' (1. 1. 37). After a battle near the Iron Gates 'the white bodies of the infidels were strewed upon the white snow' (1. 1. 159). Does it reveal humor, credulity, or mere stupidity when he says (1. 1. 56) that the doors of St. Sofia 'are all so bewitched by talismans that if you count them over so many times, there always appears to be one more than there was before'?

¹⁵ Cf. the description of the town of Kopri, 2. 218.

¹⁶ Sir Paul Rycaut, *The History of the Present State of the Ottoman Empire*, London, 1668.

testimonies of other travelers, as the Frenchmen Du Vignau and Tavernier,⁴⁷ it is possible to reconstruct with much vividness, depth, and truth the vanished Ottoman society of the seventeenth century.

The translation, so far as it may be judged without a comparison with the original, is careful and generally accurate. The English used is occasionally a little foreign,⁴⁸ but on the whole it is smooth, clear, and lively. The introduction contains a number of errors, due perhaps to von Hammer's reliance upon memory for Evliya's statements about his career.⁴⁹ The translation reaches the end of the second of four volumes written by Evliya, at the year 1648 (2. 243). Immediately afterward he went on his pilgrimage to Mecca, on which he passed through Palestine and Egypt. Von Hammer once saw the third volume, containing the travels in Egypt, in the library of Sultan Abdul Hamid I, but could never again find it there or discover another copy anywhere (1. 2. 200, 255 n. 23). Nor could he find any evidence that Evliya had continued the account of his travels beyond the year 1655 (1. 1. xii). Had the Turkish writer carried out his plan to the full and narrated the experiences of his whole life, he might have produced a work unique in interest as well as in magnitude. As it is, one cannot perhaps dissent seriously from the summary opinion of the translator, who says: 'Evliya must be considered as but an indifferent poet and historian. But in the description of the countries he visited he is most faithful, and his work must be allowed to be unequalled by any other hitherto known Oriental travels' (1. 1. xiv). At any rate he deserves to be placed in the group with such famous wanderers as Masudi, Benjamin of Tudela, Ibn Jubair, and Ibn Batutah.

⁴⁷ J. B. Tavernier, *Nouvelle relation de l'intérieur du Serail du Grand Seigneur*, Paris, 1681; Sieur Du Vignau, *L'Etat présent de la puissance Ottomane*, Paris, 1687.

⁴⁸ For instance, the use of 'chapel' (*Kapelle*) for 'band', of 'worsh' (*écorcher*) for 'flay', etc.

⁴⁹ See notes 17 and 35. Von Hammer says also that Evliya's uncle Malik Ahmed went to Constantinople to be married to a second princess (1. 1. xii), whereas the text states that he went to be present at the marriage of a princess. He says that Evliya traveled 41 years (1. 1. vi), while the text gives the number as 51 (1. 1. 174).

NAVIGATION TO THE FAR EAST UNDER THE ROMAN EMPIRE

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Communication between Mediterranean lands and the Far East, which had been growing in importance since establishment of political contact in the conquests of Alexander and the consequent opening of the overland caravan routes, became exceedingly active between the first and third centuries of the Christian era through the discovery of the periodicity of the trade winds and the opening of active maritime traffic. There was, however, among writers in the Roman world considerable confusion because of their assumption that the land and sea routes had the same destination. This confusion, due partly to primitive misconceptions of geography, was greatly enhanced by the surprising misinterpretation of reports of various travelers upon which Ptolemy based his geographical calculations.

In tracing the caravan route it is impossible to go far astray because of limitations imposed by mountains, deserts, and water-courses. Richthofen (*China*, 1, 10) and others have followed the whole route between the Pamirs and *Sera metropolis*, which may quite surely be identified with the ancient Chinese capital Singan-fo. This was the great trade route of the silk merchants, and that trade was already of importance in the second century before the Christian era. The sea route was opened first to the west coast of India and Ceylon, where contact was made with another sea route leading further east known to the natives of India as the 'golden route,'¹ and its eastern termini as the 'golden and silver islands'—whence silk was also obtained. Inland from these islands (or shores, either interpretation being possible), was a metropolis *Sina Siaorum*, known to the Roman world by hearsay only, and assumed to be identical with the earlier known *Sera metropolis*, so that both caravan and maritime routes were supposed to have reached the same trade centers.

¹ Nanda Lal Dey, *Notes on the History of the District of Hugli or the Ancient Rada*, JASB new series, 6, no. 11, 1910.

Although the various ports of call along this ocean route have been reasonably identified by comparison of place names, consideration of sailing conditions may still yield matter of interest.

Graeco-Roman navigation in the Indian ocean, as we know from ample evidence from coins, painting, and sculpture, was carried on in open craft, felucca rigged, very similar to the Arab dhows of our own time. Sailing before the wind was preferred: considerable effort was required to hold a course with the wind abeam, and tacking against the wind was not attempted out of sight of land because neither log nor compass was available for calculating or holding a course. The trade winds, which blew from southwest to northeast between April and October, and in the reverse direction between October to April, had doubtless long been used by Arab and Dravidian mariners, but vessels from Egypt to reach these ocean winds depended also on the so-called etesian winds blowing from north to south, and setting in usually about mid-summer, to carry them on the long journey down the Red Sea.² The time for their voyage was therefore very limited. We learn from Pliny (*Hist. Nat.* 6, 26) that vessels set sail from Egypt at mid-summer and in about thirty days arrived at the Straits. There they met the trade wind, which they gave the name *Hippalus* from the first of their countrymen to discover its use, and after exchanging cargo, set sail for India and reached the Malabar coast in forty days. Owing to depredations of pirates, they were obliged to steer with the wind partly abeam so as to make a landfall at the Tamil ports near the southern extremity of India. There they again exchanged cargo and set sail on their return voyage in December, using the south-east trade wind, which, owing to climatic influence due to the Sahara and Arabian deserts, is projected up the Red Sea as a southerly wind. Only by adopting this sailing schedule could the return journey be made in the same season. The voyage from the ports of the Dravidian kingdoms and Ceylon to the Far East was undertaken under similar conditions, except that, since no secondary passage had to be made through a body of water like the Red Sea, the whole period of each monsoon could be utilized. It was easy for the Chola mariners to reach Farther India and the South China Sea with a longer period for exchange

² *Peripl. Mar. Erythr.* 57.

of cargoes and to return the same season. For vessels hailing from Red Sea ports this was impossible. To the Greek or Roman merchant who ventured to the Far East this was a venture indeed, not to be undertaken unless under exceptional conditions of charter or cargo to be secured. There is, however, good reason to believe that the eastern sea trade of India exceeded its western trade and that the commercial activity of Rome in its prosperous period was but the reflection of greater activity in the capitals of India from Madura to Palibothra.

Comparison of the evidence available from the records of Rome, India, and China is of interest. Professor Hirth² has made the Chinese Annals available, and we find that although the southern coast of China proper, including the ports of Kwang-Tung and Fo-Kien provinces, had not as yet been made part of China, the province of Tong-King had been over-run by the Chinese B. C. 214, was incorporated into the Empire B. C. 111, and remained a Chinese possession until A. D. 263.³ This conquest followed that of the province of Yun-Nan, still one of the richest provinces of China in metals, in forestry and agriculture. From the capital of Yun-Nan situated on an inland lake, vividly described by Marco Polo (2. 48), and evidently reflected through the accounts of the Roman traders, there was a well-defined trade route down the Yang-tse river and overland through central China to the capital Singan-fu on the watershed of the Yellow River; and from the adjoining plateau of eastern Tibet through parallel valleys within a few miles of each other flow not only the Yang-tse and the Red River of Tong-King, but the Me-Kong of Cochin China, the Salwin and Irawadi of Burma. Adjoining Yun-Nan in the water-sheds of these Burmese rivers was located the kingdom of the Shans, then an important tribal federation, and there is reason to believe that an active trade existed out of China through Yun-Nan with the Shans as intermediaries. A Chinese record dating from A. D. 120 informs us that 'the king of the country of Shan sent an embassy to the Chinese Emperor offering musicians and jugglers,' whose accomplishments suggest the juggling of India, and

² *China and the Roman Orient*, *passim*, from which references herein are quoted.

³ Richthofen, *op. cit.* 1. 502.

who said: 'We are men from the west of the sea. The west of the sea is the same as Ta-Tsin. In the southwest of the country of Shan one passes through to Ta-Tsin.'* While Ta-Tsin was the name given by the Chinese to the eastern lands of the Roman Empire, it cannot always be given that meaning, and in this case seems to mean merely people coming from the West. The route is, however, clear; the embassy came by sea to the southwest of the Shan country, that is, the Gulf of Martaban, the shores immediately east of the modern Rangoon, and proceeded inland up one of the river valleys. The modern rail route leaving Rangoon follows the valley of the Sittaung river to Mandalay, thence up the Irawadi. At Bhamo, the head of navigation on that river, the overland route to Yun-Nan began crossing the parallel gorges of the other rivers by suspension bridges. The earlier route probably ascended the Salwin passing the Shan capital Theinni and crossing the other rivers a little lower down, both routes having as their destination Yun-nan-fu, Cheng-tu-fu, and finally Singan-fu. Another Chinese record informs us that in A. D. 166 the king of Ta-Tsin, 'An-tun,' who may of course be identified with Marcus Aurelius, 'sent an embassy with tribute from the frontier of Jih-Nan,' and that 'merchants of this country frequently visit Fu-Nan, Jih-Nan, and Kiao-Tsi,' but that 'few of the inhabitants of those southern frontier states ever went to Ta-Tsin.'* We have here evidently still a confusion of Burma, southern India, and the Roman East. The name of Antoninus suggests a stray Roman subject, but the merchants 'frequently visiting the southern states,' which we may identify with the modern Siam, Annam, and Tong-King, must have come from the ports of India or Ceylon. Another record dating from the fourth century gives us the route from the Chinese capital to its Tong-King seaport, and the routes down the other rivers as follows: 'southeast you come to Kiao-Tsi; there is also connection by water [in fact by both river and ocean routes] with the principalities of Yun-Nan and Yung-Chang [near Bhamo; that is, through Burma].' Chinese interest in distant lands is reflected in this same record in its concluding observation: 'Although in that country, Ta-Tsin, sun and moon and the con-

* *Hou-han-shu*, c. 26.

* *Ibid.* c. 88; *Liang-shu*, c. 54.

stellations are quite the same as in China, former historians say that going a hundred *li* west of Tiao-Chih [mouth of the Euphrates] you come to the place where the sun sets. This is far from being true."

From the hills of Yun-Nan came gold, silver, and precious stones, silk, and the fragrant cinnamon bark so greatly prized in Rome. The upper Yang-Tse in Chinese speech is still the 'river of the golden sands,' and a recent traveler refers to a neighboring river valley as being called the 'silver shore.'¹⁰ The overland route from Yun-Nan to the upper Irawadi was used by conquering Chinese troops in the 18th century and was by them called the 'gold and silver route.'¹¹ The southern part of China mentioned in the record as southeast from Yun-Nan, that is, down the Song-Koi or Red River of Tong-King and named Kiao-Tsi, we may safely follow Richthofen in identifying as the *Kattigara* (or *Katti-nagara*, from some Prakrit-speaking pilot!) of Ptolemy and other Roman writers. This gave the Chinese Empire an outlet to the southern seas, the sailing course from which, being within the tropics, was steered by the southern cross and not the north star. The south seems to have been the cardinal direction with the Chinese. The magnetic needle having already been known to them for centuries, although apparently not put to practical uses for navigation, was also called the south-pointing chariot.¹²

Indian records of Farther India show very active communication at this same time. There was missionary activity of all creeds then held in India—Brahmin, Buddhist, and Jain—and there was active sea trade. The 'golden route' of the Chinese was known in India as the Golden Coast, *Suvarna bhūmi*, and near one of the mouths of the Ganges was an important port of India named *Suvarna Grāma*, the Golden Port, better known in the days of Arab trade as *Sonargaon*.¹³ Not only from the

¹⁰ *Wei-shu*, c. 102.

¹¹ Johnston, *From Peking to Mandalay*, p. 35, 44, 104, 255.

¹² Cordier's Yule's *Marco Polo*, 2, 67-76.

¹³ Hirth, *Ancient History of China*, p. 126-134.

¹⁴ Nunde Lal Dey, *Notes on Ancient Jangs or the District of Bhagalpur*, *JASB* new series, 10, no. 9, 1914; cf. the *Mahājanaka Jātaka*, where a single ship from Chāmpā to Suvarnabhūmi had on board seven caravans with their beasts.

kingdoms of the Ganges was there navigation across the Bay of Bengal; from southern India the sea trade was so important that the Andhra kings struck numerous coins bearing the impression of capacious two-masted vessels used in that service and evidently regarded as the source of national power and prosperity. The Tamil poem *Paddinappalai*¹¹ gives us a vivid description of a busy port of the Chola Kingdom, *Kaviripaddinam*, which was built on the northern bank of the Kaviri river, then a broad and deep stream into which heavily laden ships entered from the sea without slackening sail. At the beach were raised platforms and warehouses where cargoes were stored. The goods were stamped with the royal tiger stamp after payment of customs duty and then released to the merchants. Close by were settlements of the Yāvana merchants, which name included not only Ionians or Greeks, but Graeco-Bactrians and Parthians. Here were quartered foreign traders from other lands beyond the seas, and precious cargoes of many kinds were brought from all directions—from the northern mountains, the western coast, the valley of the Ganges, Ceylon and Burma. There were lighthouses built of brick and mortar which exhibited flashing lights at night to guide ships to port. Among the workmen on the Chola palace in that city were not only artisans from all parts of India, but carpenters from Yāvana, that is, probably Greeks from Egypt or Syria. Another Tamil poem describes the 'seaport of Muchiri on the west coast near the mouth of the Periyar where the beautiful large ships of the Yāvanas bringing gold come splashing the white foam on the waters of the Periyar which belongs to the Cherala and return laden with pepper.'¹²

An early Sanskrit play of India, 'The Little Clay Cart,' describes the same activity. One of the characters is a gentleman 'dressed in silken raiment glittering with rich ornaments.' In one of the scenes appears a row of jewelers' shops 'where skilful artists are examining pearls, topazes, sapphires, beryls, rubies, lapis lazuli, coral, and other jewels; some set rubies in gold; some work with gold ornaments on colored thread; some string pearls; some grind lapis lazuli; some pierce shells and some cut

¹¹ Quoted from Mookerji, *History of Indian Shipping*, p. 135-6; see also Pillai, *The Tamils 1800 Years Ago*, p. 16, 24-26.

¹² *Krukkaddur Thayan Kannanar-Akam*; quoted from Mookerji, *op. cit.* p. 135.

There is a triple confusion in all these sailing courses of the Roman period. Mediterranean courses were set by the north star, and 'the right-hand coast' would be east. Red Sea courses were set by the wind and the coast-line, never far distant, and the direction being south, the western or African shore was the 'right-hand coast' and the eastern or Asiatic shore the 'left-hand coast.' At the Horn of Africa, Cape Guardafui, the course was set by the trade winds, and connection was made with the active shipping of India, where the cardinal direction was east. This may have led to Pliny's and Ptolemy's failure to realize the southern extension of India, which was well known to the author of the *Periplus*. At the Tamil ports in Southern India, connection was made with shipping bound across the Bay of Bengal to the Golden Chersonese, also a course steered by the trade winds. There connection was made with Malay or Chinese shipping bound to Kattigara, but once past the Straits of Malacca, directions were reversed, and an actual east-and-north course was reported as south-and-west. This may have been due merely to the different point of view of the steersman. The Greek southbound was steering backward, as it were; and the Chinaman forward, south being his cardinal direction.

But finally we have the correct description of the trend of the coast at the head of the Gulf of Tong-King, indicating personal observation by some navigator who was neither Tamil, Hindu, nor Chinese, and the wholly unwarranted assumption that the coast of Hainan extended westward all the way to Cape Prasum in Africa (*Peripl. Mar. Ext.* 40). A like assumption was made by the author of the *Periplus* for Ceylon (*Peripl. Mar. Erythr.* 61). Both were due to the notion of a southern continent or Antichthones, conceived by both Greeks and Romans as necessary to counterbalance the Eurasian continent and so prevent it from sliding off toward the ultimate north.¹¹

The inferences as to Roman enterprise by sea to the far east are negative. That Roman shipping frequented the ports of the

¹¹ Cf. Pomponius Mela, *De Situ Orbis*, 1: 9: quod si est alter Orbis, sunt quae oppositi nobis a meridie Antichthones, ne illud quidem a vero nimium abscesserit, in illis terris oritur amnum, ubi subter maria eneo alveo penetraverit, in nostris rursus emergere et hac re solstitio accrescere, quod tum hiems sit unde oritur. Alia quoque in his terris mira sunt . . .

Tamil Kingdoms and Ceylon is undoubted. But of the great beyond, they brought back hearsay. The author of the *Periplus*, like Tavernier in the 17th Century, gives us a summary out of the Rāmāyana and the Purānas. Marinus of Tyre gives the accounts of a few other mariners, on which Ptolemy makes specious calculations. Tamil literature and coinage alike testify to maritime enterprise eastward, and Chinese annals refer to a few visits of people coming 'from the west of the sea'—which may mean Tamil Land and Ceylon, though in one case the mention of An-Tun seems to mean a Roman subject. All point to the same conclusion, that Roman ships in the Bay of Bengal and the China Sea were so rare that two or three in a century might tell their tale.

But what of that other voyager out of the west, who came to Kattigara and, being conducted to the Chinese Court, gave an account of the lands to the west of the sea, which the Annalist warns us are not at the place where the sun sets? His name comes to us as *Tsin-Lun*¹⁵; that may be no more than Lun, the Tsin, or Roman; and may not Lun also be some attempt of the Chinaman to pronounce *Romanus*? Here was an earlier Marco Polo who should have been imprisoned by some enemy, that the world might be the richer for his memoirs. For of the vast Pacific the only witness to the Roman world might be, as Marcian put it, 'some God who knows.'

¹⁵ *Liang-sha*, c. 54.

BRIEF NOTES

Babylonian Titles of Medical Textbooks

In *CT* 14, plate 23, the obverse of K 9283 and K 259 are reproduced. The former tablet deals with the treatment of bites and stings of venomous animals; the latter is a pharmaco-therapeutic list for toothache, shaking tooth, and tooth-decay. The reverse of neither of the tablets is there published. The obverse of K 259 was first reproduced together with K 191 by Sayce and is widely used in the literature. The lack of reproductions of the reverse has been a handicap in the determination of the relationship of the different pharmaco-therapeutic series of tablets. The authorities of the British Museum have allowed the reverse to be photographed, and a reproduction of it accompanies this note.

The principal part is the phraseology known from every colophon of Assurbanipal's library. Of the first extant line of the reverse of K 259 only traces are preserved. The end of this line and the next 3 lines read: *nisik tupsaruti ša ina šarani alik māhria mamma šipru šuatu la iħuzu . . . mala bāšmu ina tuppāni aštur asnik abrima ana tamartī šitassia kirib ikallia ukin.* The signs of the lacuna are: *TI KIB SA AN IV U LI.* The first part of the phraseology (*nisik* to *ukin*) recurs in every tablet of the *suatu* series, and there a longer passage of the lacuna shows the real title of the medical textbook of which the three *suatu* tablets form a separate volume. The above lacuna of K 259 is again the real title of a large series of tablets containing the *materia medica*, the indication of the special drug, and its special application, arranged in classified form in three columns. It was some sort of Babylonian practitioner's memorandum.

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The Name Hammurabi

Since the appearance of Ungnad's note on 'Ammurapi,' *ZA* 22 (1908), p. 7 f., the spelling *Hammurapi* has gradually been displacing the older transcription of the name of the greatest

of the kings of the First Dynasty of Babylon. So generally has Ungnad's reading been accepted that the time seems to have come when one may be asked to show cause for not adopting the new spelling.¹

Ungnad's argument is based almost wholly upon the form *Am-mu-ra-PI* found on K 552, a letter published by Harper, *Letters*, 3, No. 255. On this name Ungnad has the following to say: 'Eine Assimilation oder sonst einen Grund weswegen *b* zu *p* geworden sein sollte, kann ich in dem Namen des Königs nicht entdecken. Wir werden demnach anzunehmen haben, das der Schreiber tatsächlich *Ammurapi* hörte oder sprach.'

But then the ancients at times show a deplorable disinclination to abide by the rules laid down in our Assyrian grammars. Perhaps the scribe made a mistake or was careless. Assyrian scribes could make mistakes and they could be careless. One of them wrote *ru-ku-pi-ja* for *ru-ku-bi-ja* (Sennacherib, Taylor Cylinder, 5, 80)—to mention the last example my eyes happened to rest upon. Or the scribe may have been a Babylonian. His signs are Babylonian, not Assyrian. In that case the *PI*-sign may have had a value other than *pi*. In view of such possibilities as these I have felt all along that Ungnad had failed to prove his case, and therefore, saw no reason for adopting his spelling. I believe we are now in a position to show that the spelling *Hammurapi* does not render the real pronunciation of the name any better than does *Hammurabi*, if as well.

The name *Hammurabi* was explained by a late Assyrian scribe as equivalent to *kimtu rapaštu* (*kim-ta ra-pa-aš-tum*) 'the widespread people,' *VR* 44. This etymology does not fall in line with Ungnad's conclusions, so the scribe is labeled 'der nicht sehr erfahrene Nameninterpret.' Neither does Professor Princee see any reason for taking the etymology seriously, *JBL* 29 (1910), p. 21 f. I agree with Ungnad that the scribe probably did not regard the element *rabi* as Babylonian, else he would have translated *kimtu rabitu*. Perhaps I am inclined to give the scribe too high a rating as a philologist, but if he pronounced it *rapi*, as Ungnad asserts he must have done, we ought to be able to find

¹ Even the proofreaders of the University of Chicago Press took advantage of the writer's absence from the city to correct his *Hammurabi* into *Hammurapi*, *AJSL* 33 (1917), p. 250 f.

some West-Semitic word which the scribe saw in *rapi* and which he supposed had the meaning *rapatu* 'wide, numerous.' Evidently Ungnad did not think it worth while to attempt to do this.

We now know that the interest of scribes in personal names did not spring up in late Assyrian days, but goes back to the time of the First Dynasty and earlier. Dr. Chiera has recently published a syllabary and lists of personal names which were the work of the priest-professors and students of the Temple School at Nippur.² Besides Sumerian and Akkadian names these lists contain many which Chiera calls 'Amoritic.' We used to call them 'West-Semitic.' But the label is immaterial. Chiera pointed out some interesting variant spellings of Amoritic names (p. 37). Alongside of *di-PI-ir-a-hi* (*a-hi, mu-ti*) we find *di-BI-ir-a-bi* (etc.). Another name appears in these forms: *ar-pu*(or *bu*)-*um*, *ar-mu-e-um*, and *ar-wi*(*PI*)-*um*. Still another has the variant spellings *ar-mi-tum* and *ar-wi*(*PI*)-*tum*.

At first sight the *di-PI-ir* and *di-BI-ir* variants seem to bear out Ungnad's contention. But in the time of the First Dynasty of Babylon, the period from which these school-texts come, the *PI*-sign almost invariably had the value *w(a, i, u)*. *Dibir* is, therefore, not a variant of *dipir* but of *diwir*.³ These and the other variants given above show that besides the *PI*-sign the *bi*-, *pu*(or *bu*)-, *mu*-, and *mi*-signs were used to render a West-Semitic *w*.⁴

Is *Hammurobi* the Babylonian rendering of a West-Semitic name *Ammurawi*? If so, the scribe who wrote the name *AmmuraPI* probably pronounced it *Ammurawi*, not *Ammuropi*, and the main prop of Ungnad's argument falls to the ground.

² *Lists of Personal Names from the Temple School of Nippur* (nos. 1 and 2 published).

³ Chiera saw this. He also shows that we shall probably have to correct our reading of names beginning in *apil* (*abit*), usually translated 'son of,' and read instead *awil* 'man of.'

⁴ We know that the *w* was disappearing from the Babylonian language. In forms where it was retained the *PI*-sign came to be the ordinary sign used to reproduce it. That this usage was reached through a process of elimination is shown by the use of the *pu(bu)*-, *mi*-, and *mu*-signs. In course of time *awilum* became *amflu*. Cf. *mu-um-ma-al-li-do-at*, of l. 4 of the Babylonian version of the Creation Epic. Note also that in the Code of Hammurabi we find the participle *babil* and the noun *bilum*, which are derived from the root *wablu*.

But the question of the etymology of the name still remains. At this point we must note the important variant *Ha-am-mu-rabi-ik*, found in a Mesopotamian document published by Johns in *PSBA* 29 (1907), p. 177, and the name *Ti-rabi^h* of the Amarna Letters.⁸ Hommel compares the element *rabi^h* 'wide' with the Arabic *rabaha*, *rubagha*, *rafaha*, *rafugha* (*OLZ* 1907, p. 485, n. 2). Ungnad reads *rapi^h* and thinks of the Arabic  or . but in view of the fact that neither of these roots has been found in West-Semitic names he does not care to press the matter of the etymology of this element of the name. There is smooth sailing if we assume that *rabi^h* stood for the West-Semitic *rawi^h*. The root  *rawi^h* has the general meaning 'to be airy, roomy, wide,' and *kimtu rapaštu* would then be a fair translation of the name Hammurabi.⁹ *HammuraBI* and *AmmuraPI* are variants, like *di-BI-ir-abi* and *di-PI-ir-abi*, of an Amorite name, the middle radical of whose second element was *w*. The disappearance of the *h* in the Babylonian forms of the name causes no difficulty. Whether the first element of the name, *Hammu*, is to be taken as the equivalent of the West-Semitic  'people, family,' as the Assyrian scribe believed, or as the epithet of a deity, as most modern scholars hold, cannot, I believe, be decided.¹⁰

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Assyrian *lāmu*, 'aspect'—Arabic *lāmū*, 'color'

In Assyrian we have a noun *lānu* 'aspect, form.' The Sumerian equivalent is *alam*, which is also explained by Assyrian *galmu* 'image' and by *galālu* 'to lie down' (cf. *SGL* 9; 196, l. 7; 206, nu ii). Assyrian *lānu* is a synonym of *igaru* (= *higaru*).

¹ See Knudtzon, *Die El-Amarna Tafeln*, index, p. 1563.

¹ Hommel's *rabib* also has the meaning 'wide,' but if we start with this we cannot account for the Babylonian variants, *raBI* and *raPI*. The Amraphel of Gen. 14 is of no more value in the determination of the pronunciation of Hammurabi than is the Asnapper of Ezra 4. 10 for that of Ashurbanipal.

¹ For the literature on the different attempts to interpret this name see Talayiot, *Akkadian Personal Names*, p. 84.

'enclosure, wall' (cf. *SGL* 26, 49, 192, 274). *HW* 382^a separates *lānu* 'enclosure' from *lānu* 'aspect, form, frame.' We call an enclosing border (French *cadre* = Latin *quadrum* 'square') a *frame* and *frame* denotes also 'form, structure.' In *NE* 136. 60 we have *lān-pāni* 'forecastle' (lit. 'enclosure of the front') = French *gaillard d'avant*, German *Back*, i. e. the place in the eyes of a ship where the seamen live. Another synonym of *lānu* is *zīmu*, which signifies originally 'bloom,' then especially 'rosy hue of the cheeks.' It has passed into Aramaic as *zīgā* (Dan. 5. 6, 9, 10; 7. 28), but corresponds to the Arabic *zāhy*, from *zāhā*, *zāhū* 'to bloom, flourish.'

Just as *bāt* 'he passed the night' (Dan. 6. 19) means originally 'he housed' (German *er hauste*), as a denominative verb derived from *bāt* 'house' (which is connected with the preposition *bā* 'in' and the verb *bā* 'he entered,' lit. 'he inned'; see *AJSL* 22. 259), so Hebrew *lān* 'he spent the night' is derived from a noun corresponding to Assyrian *lānu* 'enclosure' (contrast *GB*^{1a} 385^b). It means originally 'he made an enclosure' (Heb. *sīrā*; cf. *GB*^{1a} 276^a; Delitzsch, *Jes.* 705; *BL* 119). In the Sūdān and the adjoining regions a fenced camp or enclosure for the protection of the animals of a caravan during the night is called *zāreṣba*; for the original meaning of this term see my remarks in *AJSL* 32. 66.

As to the connection between *lānu* 'aspect' and *lānu* 'enclosure,' we may compare our *complexion*, which denotes 'aspect, general appearance,' but especially 'color of the face' (French *teint*), although it is derived from Latin *complecti* 'to encompass.' This shows that Assyrian *lānu* is identical with Arabic *lāyn* 'color, form, aspect, species' (cf. Ethiopic *qāl* = *qāyal*, for Arabic *qāyl*). Dr. Ember identifies Arabic *lāyn* = Assyrian *lānu* with Egyptian *'pn* (𠁩) 'color,' Coptic *EINE* 'image, form.' For the semantic connection between *species* and *enclosure* we may compare the Latin phrase *omnia una comprehensione complecti*. Arabic *sāhnah* (or *sahnā*) means 'exterior, figure, form, complexion,' while Syriac *sāhāntā* denotes 'good complexion, beautiful natural color,' and Ethiopic *senhāt* signifies 'a bald head' (lit. 'smooth,' cf. Heb. *halāq*, Gen. 27. 11). German *Glatze* is connected with *gleissen* 'to glisten'; Middle High German *glitze* means both 'gloss' and 'baldness.' Arabic *sāhāna* signifies 'to break, bray, triturate, grind, smoothe' (syn.

kásara, dálaka, sáhaqa, dáraka, márasa, máraʃa). Trituration of pigments renders them smooth; cf. my remarks on Sumerian *daggas* 'mineral pigments' (lit. 'ground stone'), which appears in Arabic as *daqṣ, raqṣ, niqṣ, niqṣ* (*OLZ* 16. 493; 17. 53, n. 5). Arabic *niqṣ* means 'figure, picture' and 'pigment, color' (cf. *naqṣ* 'image, likeness'). Middle High German *lich* was used not only for 'dead body' (German *Leiche*; cf. Eng. *likewake, lichwake, lichway, lichgate*), but also for 'body, color of the skin, hue of the face, complexion, form, figure, appearance, aspect.' Our *hue* meant originally not only 'color,' but also 'appearance, form,' and just as Hebrew *malón* denotes 'lodging-place,' while Assyrian *lānu* means 'aspect,' so we have *habitation* 'place of abode' and *habitus* 'general appearance,' both derived from Latin *habere*.

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The Reading of GIS-ŪH²

A number of monuments from ancient Babylonia of the early period, such as the Stele of Vultures, the cone and net-cylinder of Entemena, the vase of Iugal-zag-gi-si, and the clay tablet of Uru-ka-gi-na tell us of an important city whose name was expressed by the ideogram *GIS-ŪH²*, also transliterated *GIS-ŪU²*, the true reading of which was in doubt. In spite of the confidence with which some, notably Contenau in the introduction to his *Contribution à l'histoire économique d'Umma*, have recently read the ideogram *Umma*, that reading was by no means certain.

In a syllabary belonging to the British Museum and published in Rawlinson V, col. 1. 4, the reading for *GIS-ŪH²* seemed to the copyist, Dr. T. G. Pinches, to be perhaps *šit-ma*. In *CT* 12. 28. 4, Dr. R. C. Thompson, in 1901, gave the following for the equivalent: 𒂔 𒂔 𒂔. Meissner copied the text thus: 𒂔 𒂔 𒂔 (see *ZA* 20. 423), for which in his *Seltene Ideogramme*, no. 8539, he offered *um* (! oder *al*)-*ma* as the reading. In 1915, Dr. Pinches re-examined the tablet just before he published the Behrens Collection, and says the signs seem to be 𒂔 𒂔 𒂔, which he thinks might be read *šir-ma*. At the same time he gave up a previous reading *ū-ma*. On the whole he admits that *um-ma* may be correct. In this connection he also makes the interesting suggestion

that the modern Arabic *Jokha* may be a corruption of the ancient *GIS-ĜH*.

In the writer's collection there is a small tablet which puts the reading *Um-ma* beyond any further doubt. It consists of unbaked, light-brown clay. The left border of the obverse is worn down. Everything of importance on the tablet, however, except the first sign of the sixth line is well preserved. That sign, which occurs before the city name, *Um-ma^{hi}*, is almost certainly *shag* or *shd*, meaning 'at' or 'in.'

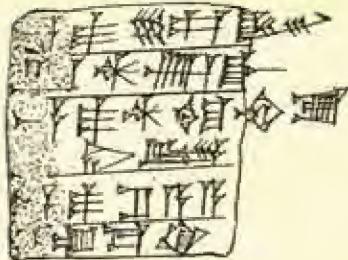
The contents of the tablet relate to three consignments of grain, one of which *Ur-nun-gal* received, another *Ningirsu-nishag*, the remainder being left in *Umma*. In the first line of the reverse the sign *kab* before *kišib* is new to the writer. In this connection very likely it means 'stamped' by the seal of *A-ab-ba*. Whether the sign following the name is a compound of *bi* and *diš* meaning 'his first,' or whether it is intended for *sim*, a title, or is a new sign altogether, the writer is unable to say. A tentative translation of the tablet follows:—

'1 gur 150 qa of wheat, royal (measure), *Ur⁴ Nun-gal*; 1 gur 150 qa of wheat, "Nin-gir-su-ni-shag"; 1 gur 150 qa surplus in *Umma*. *Aabba* struck his first seal [1].

From the month *Maš-azag-kú* to the month *Ā-ki-ti*, six months; the year the wall of the land was built.'

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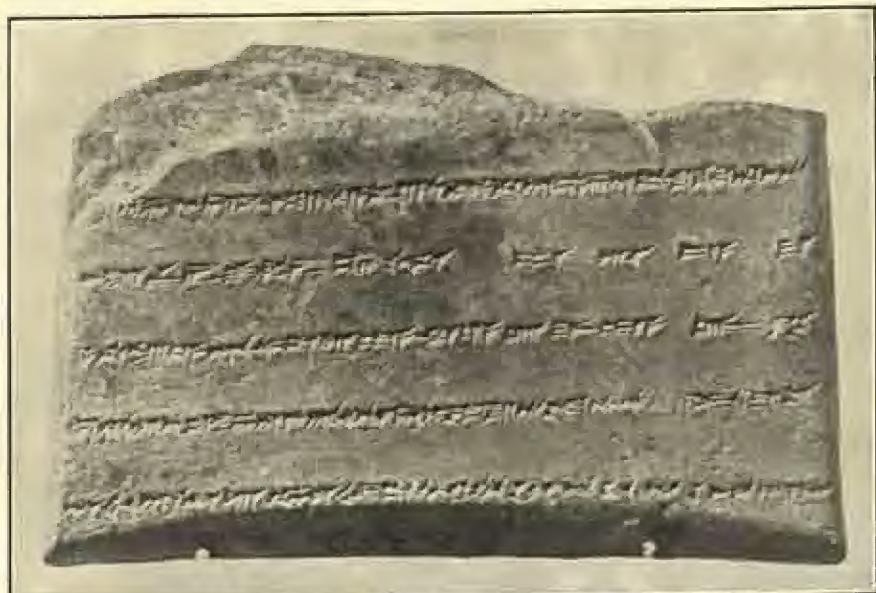


OBVERSE



REVERSE

TABLET FROM DREHEM DATED IN THE REIGN OF DUNGI, KING OF UR
(See Nies, 'The Reading of GIS-ŪHU')



REVERSE OF TABLET K259 OF THE KUYOUNJIK COLLECTION,
BRITISH MUSEUM

(See von Oefele, 'Babylonian Titles of Medical Textbooks')

THE KASHMIRIAN ATHARVA-VEDA, BOOK FIVE

EDITED WITH CRITICAL NOTES

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INTRODUCTION

In editing this fifth book of the Kashmirian Atharva-Veda little change has been made from the method of presentation used in the first four books (published in vols. 26, 30, 32, and 35 of this JOURNAL). The transliteration (in italics) is not given line for line, but is continuous, with the number of each line in brackets; the method is familiar, and there should be no difficulty in comparing any passage with the facsimile. The results attained here fall short of my hopes: but in dealing with new material given to us in such condition as in this ms. it seems inevitable that the results will be uncertain and all too often unsatisfactory. As soon as circumstances will permit Book 19 will be published: it contains a large amount of the material given by S. in its Book 6 and Book 7.

The abbreviations employed are the usual ones, except that 'S' is used to refer to the AV. of the Sāunakiya School, and 'ms.' (sic) is used for manuscript. The signs of punctuation used in the ms. are fairly represented by the vertical bar (= colon) and the 'x' (= period); the Roman period is used for *virāma*; daggers indicate a corrupt reading.

Of the ms.—This fifth book in the Kashmir ms. begins f.74b l.17 and ends f.90a l.8—a little more than 15 folios. Wrong numbers are affixed to f.85 and f.86, but the facsimile gives these folios in the proper sequence for the text: i. e. f.86ab following f.84b, then f.85ab, then f.87a. None of these folios are defaced; most of the pages have 18 or 19 lines, only 6 having 17.

Punctuation, numbers, etc.—Within the individual hymns punctuation is most irregular; only three accent marks appear, in st. 1 of no. 40. The hymns are grouped in *anuvākas*, of

which there are 8 with 5 hymns in each: ann. 4 no. 2 has no number after it; ann. 8 no. 2 is numbered 1, and ann. 8 is numbered 5. There are some corrections, both marginal and interlinear, usually consisting of 2 or 3 letters.

Extent of the book.—The book is made up of 40 hymns of which 2 are prose and at least one other is partly prose. The normal number of stanzas in a hymn is 8: 21 hymns have 8 stanzas each and not one has less. Assuming the correctness of the verse-divisions of the text as edited below we may make the following table:—

21 hymns have	8 stanzas each	=	168 stanzas
10 "	9 "	=	90 "
4 "	10 "	=	40 "
1 "	11 "	=	11 "
1 "	12 "	=	12 "
2 "	14 "	=	28 "
1 seems to have	9 stanzas	=	9 "
40 hymns have			<hr/> 358 stanzas

New and old material.—There are 25 hymns in this book which may fairly be called new, although material already familiar in other texts enters to some extent into the structure of some of them. The number of stanzas which are essentially new seems to be 203; the pādas which do not appear in the *Concordance* are approximately 775 in number.

Of the 31 hymns which constitute S. 5 only one appears here, but 8 of the hymns of S. 4 appear here; there are here also 2 hymns of S. 3, and 4 of S. 6 (3 of these are combined into one hymn here). Two hymns of RV. appear here: a passage of MS. is given here with some variants, and several stanzas of Tāittirīya texts appear. A group of three verses quoted by Vāit. are part of a hymn given here; and another group of three verses quoted by Kāuś. appear in another hymn here. Other correspondences are insignificant.

ATHARVA-VEDA PĀIPPALĀDA-SĀKHĀ

BOOK FIVE

I

[f.74b17] *atha pañcamāś kāñdā likhyate* z z [18] *oṁ namo*
ganeśīya z *oṁ namo jvālābhagavatyāḥ* z z

[f.75a1] *oṁ nāmaś piśāṅgabāhvī sindhujātāyā ugrāyā* yo
yo *nameta kanad aped a[2]syu* *grhād* *ayat.* | *apehi* *no* *grhebhyo*
pehi *vatsatāmbhyā* *ātmānam* *atra* *rocī[3]t* *savaroham* *ahā* *naśa* |
hāmba *sūtale* *tho* *vāi* *sā* *me* *śāmtamā* | *putro* *yas* *te* *prṣni*-[4]
bōhus *tama* *tvām* *sāsanām* *kṛdhī* | *atho* *duhitaram* *naptrīp* *atho*
tvām *sāmanā* *bha[5]bhava* *bhūtapatir* *nir* *ajāty* *indraś* *cetas*
sadānvā | *grhasya* *rudhnāśinā* *tā* *va[6]jrenādhi* *tiṣṭhatu* | *apete-*
tis *sadānvāhīnsantīr* *imām* *grham* | *dhenur* *vā[7]tra* *sthāmy*
asaty *anadvān* *vedayā* *saha* | *yas* *sahamānaś* *carasi* *sāsahā*-[8]
nōiva *ṛṣabha* | *sadānvāghram* *tvā* *vayam* *jāitrāyātsāvadāmasi* |
sa[9]hasrino *bhimātiham* *sahasra* *prtanāyataḥ* | *sahasra* *sarvā*
rakṣānsi [10] *sahasrām* *osadhe* *tvām* *vyāghrān* *sahame* *tvām*
ṛṣahvān *ubhayāduta* | *ma[11]kṣaś* *cita* *kṛnvānā* *madhu* *tvām*
sahasrāuṣadhe z 1 z

For the introductory phrase and the invocation read: *atha*
pañcamāś *kāñdo* *likhyate* z z *oṁ namo* *ganeśīya* z *oṁ namo*
jvālābhagavatyāḥ z

For the hymn read: *oṁ nāmaś piśāṅgabāhvī sindhujātāyā*
ugrāyā | *yo* 'syāi *nāma* *id* *akarad* *aped* *asya* *grhād* *ayat* z 1 z *apehi*
no *grhebhyo* 'pehi *vatsatāntyāḥ* | *ātmānam* *atra* *rocīt* *savaroham* +
ihā *naśa* | *thāmba* *sūtale* 'tho vāi sā me śāmtamā z 2 z *putro* *yas*
te *prṣnibāhus* *tam* u *tvām* *sāsanām* *kṛdhī* | *atho* *duhitaram*
naptrīm *atho* *tvām* *sāsanā* *bhava* z 3 z *bhūtapatir* *nir* *ajāty*
indraś *cetas* *sadānvāḥ* | *grhasya* *rudhnā* *śinūś* *tā* *vajrenādhi*
tiṣṭhatu z 4 z *apetetas* *sadānvā* *ahīnsantīr* *imām* *grham* | *dhenur*
vātra *sthāmy* *asaty* *anadvān* *vedayā* *saha* z 5 z *yas* *sahamānaś*
carasi *sāsahāna* *iva* *ṛṣabhaḥ* | *sadānvāghram* *tvā* *vayam* *jā-*
trāyācchūvadāmasi z 6 z *sahasra* no 'bhimātiham *sahasra* *prtanā-*
yataḥ | *sahasra* *sarvā* *rakṣānsi* *sahasrāśy* *osadhe* z 7 z *tvām*
vyāghrān *sahase* *tvām* *sīnhān* *ubhayādataḥ* | *sakṣaś* *cetas* *kṛnvānā*
madhu *tvām* *sahasrāuṣadhe* z 8 z 1 z

There is much uncertainty here, the most serious difficulty lying in st. 2; its first hemistich, however, seems good as given. In 2a ya ātmānam might seem good, and iha naśa is probably correct for the end of pūda d: I strongly incline to think that syllables have been lost before hāmba, perhaps enough to make a complete stanza ending with āśāntamā. RV. 8. 63. 8a is sā te agne āśāntamā. In st. 3 āśānam (and āśānā) is suggested as being more in harmony with the import of the rest of the hymn. In st. 5a sthāpyāsaty might be read.

Our st. 4 = S. 2. 14. 4; our 6ab = S. 3. 6. 4ab, and Ppp. 6. 8. 3ab varies only slightly; our 7ab = S. 19. 32. 6ab.

2

(S. 4. 1)

[I.75a12] yām pītre rāṣṭrayaḥ agre prathamāya januṣe
 bhūmināśhān tasmā etām su[13]ruca hvāram ahyām gharmaṁ
 īśvāntu prathamāsu dhāsyuḥ vrāhma jajñā[14]nam prathamām
 purastād vi śīmatas suruco vena āvāḥ sa vudvya upa-[15]
 māṁsa viśhā satāś ca yonim asatāś ca vi vāḥ z prā yo jajñē
 vi[16]deva asya bāndhuṁ viśvām devā janimā vivakti vrāhmaṇa
 uj jahbā[17]ra madhyān nicād uśā śvadhyābhi pra tasthāu |
 mahān mahī a[I.75b1]skabhāyad vi jāto dyām jitāḥ pārthivām
 ca rajah sa vudhnyārāṣṭra janu[2]śābhya akraṇ vr̄haspatir
 devatā tasya samrāṭ. | nūnām tasya gavyo hanoti mo[3]ha
 devasya pūrvasya pahi | esa jajñē bahubhismākam itihā pūrvād
 a[4]rād ariduraś casahnuḥ sa hi divas sa hi prthivyā r̄cesthā
 mayi kṣā[5]mām bhrājasi viśkabhāyati | ḍryaś chukraḥ jyotiṣo
 dhanīṣṭhā bhyaṁanto vi [6] vasañtv ariprā | yaikā vātharvā
 pītarām viśvadevām vr̄haspatir manasā [7] vo datsva | tvaṁ
 viśvasya januṣyā dhatasyāgre kavir devān adhabhāyus śvadhbā-
 [8]va | mūrdhna yo agrām abhyarty ojasā vr̄haspatīrmā civā-
 santi devāḥ [9] bhinnad balāḥ vimrdordarīti kanikradati gā-
 svar apo jīghāya z [10] z 2 z

In the top margin at the right stands ndhā and over that sāṁ.

Read: iyaṁ pītre rāṣṭry ety agre prathamāya januṣe bhū-
 mināśhāḥ | tasmā etām suruco hvāram ahyām gharmaṁ
 īśvāntu prathamāya dhāsyuḥ z 1 z vrāhma jajñānam prathamām
 purastād vi śīmatas suruco vena āvāḥ | sa budhnyā upamā asya
 viśhāḥ satāś ca yonim asatāś ca vi vāḥ z 2 z prā yo jajñē vidvān

asya bandhum viśvā devānām janimā vivakti | vrahma vrahmana
 uj jabbāra madhyān nīcād nečā svadhyābhi pra tashīu z 3 z
 mahān mahi askabhāyad vi jāto dyām dvitā pārthivām ca rajah |
 sa bndhnyād āśta januśubhy agram vṛhaspatir devatā tasya
 samrāt z 4 z nūnam tad asya kāvya hinoti maho devasya pūrv-
 asya mahi | esa jajñe bahubhis sākam itthā pūrvād arād ayidūrāt
 sasan nu z 5 z sa hi divas sa hi pṛthivyā rteṣṭhās sa hi
 kṣāmān bhrājasi viśkabhāyati | uhar yae chukrau jyotiṣo jan-
 sthātā dymumanto vi vasantv arīprāh z 6 z yathā vātharvā pitaram
 viśvadevām vṛhaspatir manasāva ca gacchat | tvam viśvasya
 januśo dhātasy agre kavir devo adabhāyus' svadhbāvū z 7 z
 mīrdrūmā yo agram abhyarty ojasā vṛhaspatim ā vivāsanti devāh
 | bhinad valāś vimṛdho dardarati kanikradat svar apo jīgāya
 z 8 z 2 z

In st. 1 I have followed closely SSS. and AŚS. for the first hemistich and for the end of pāda d: śrvantu as in our ms. hardly seems possible. The reading of st. 3 and 4 here agrees with KS. 10. 13 and almost with TS. 2. 3. 14. 6. In st. 6 rjīṣṭhas might be considered instead of rteṣṭhās. In st. 7b it seems necessary to approximate the reading of 8; in 7d adabhāyus seems to be a proper formation, and I incline to think that devāh as in the ms. might stand ahead of it. Our st. 8 appears (with variants) elsewhere only in TS. 2. 3. 14. 6; in pāda d gā seems to be an intrusion due to association with krand, though we might keep it and read the pāda kanikrad abhi gās svar apo jīgāya.

3

[f.75b10] ud apaptad asūn rāryas puradr̄ṣṭo adr̄ṣṭahā | udāyo
 ra [11] smibhruvāntūdāyah rasān akah nimratat asūn rārya
 viśvadr̄ṣṭo adr̄ [12] ṣṭahā | nimrocan raśmibhavantu nimrocan
 rasān akah | ye ca dr̄ṣṭā ye cādr̄ [13] ṣṭā ubha ye vihyavah teṣām
 vo agrabham nāma sarve sākān ni jasyaca | adr̄ [14] ṣṭahananī
 virud asī tāuā viśāsah | cyukākāni tvam jajñise [15] sādr̄ṣṭān
 jātasa hi | jahi jyeṣṭham adr̄ṣṭānām sarpañām moghacāri- [16]
 nām. kriminām sarvajātāni pānūjaṣṭi yavayañ sryā | yaś ca
 īo [17] do yaś ca sarpo yaś cādr̄ṣṭas ca yo vṛṣā | cyukākāni tvam
 tān vṛści vṛkṣām [18] paraśumān iva | sah vṛścīnāś cūkākanī
 vṛkṣām paraśumān iva | [f.76a1] sah vṛścīnāś cūkākanī
 vākṣām paraśumān iva | kriminām sarvajātāni sa [2] ndahagnīr

ivolopam metiṣṭhāgnir akhalaś tviśmān kṛminām jītā[3]ni
priyātūlī sarvā | vr̄haspatir medini jātavedā adr̄ṣṭān hantu
dr̄ṣṭā[4]deva sākhaṁ z 2 z

Read: ud apaptad asāu sūryas purudr̄ṣṭo adr̄ṣṭahā | udāyan
raśmibhir hantūdāyan rasān akāh z 1 z ny amrocad asāu sūryo
viśvadr̄ṣṭo adr̄ṣṭahā | nimrocan raśmibhir hantu nimrocan rasān
akāh z 2 z ye ca dr̄ṣṭā ye cādr̄ṣṭā uta ye 'viśyavah | teṣām vo
agrabhaśān nāma sarve sākhaṁ ni jasyata z 3 z adr̄ṣṭahānām virud
asi bhojyā viśāsahā | cyukākāni tvām jajñiṣe nādr̄ṣṭān jambhuayo
hi z 4 z jahī jyestham adr̄ṣṭānām sarpaṇām moghacārinām |
kṛminām sarvajātāni puṇiṣṭhāny avayan īrṇa z 5 z yaś ca todo
yaś ca sarpo yaś cādr̄ṣṭās ca yo dr̄ṣṭah | cyukākāni tvām tān
vr̄śeṣir vṛkṣām paraśumān iva z 6 z saṁvṛṣṭeśānām cyukākāni
vr̄kṣām paraśumān iva | kṛminām sarvajātāni sandahāgnir
ivolopam z 7 z methiṣṭhā agnir akhilaś tviśmān kṛminām
jātāni priyātūlī sarvā | vr̄haspatir medini jātavedā adr̄ṣṭān
hantu dr̄ṣṭadeva sālcām z 8 z 3 z

The end of the first two stanzas does not seem quite right; nāśānam would give a better meaning. The word cyukākāni seems to be new; it is evidently a plant name with kāna as part of the compound. In 6b vr̄śā, as in the ms., seems utterly discordant.

For the first three stanzas cf. RV. 1. 191. 7-9 and S. 2. 32.

4

(S. 5. 3)

[f.76a4] samāgne varco vīhāveṣv astu vayām tvonidhānās
ta[5]nvām puṣema | mahyām namantām pradīpāt catasras
tvoyādhyakṣena priyāñ jaye[6]mo | agne manyuñ pratinudāñ
pareṣām tvām no gopāñ pari pīhi viśvataḥ | apāñ[7]co yañtu
pravudhā durasyaovo māniṣā cīttān dāhudhā vi naśyatu | mama
devā[8] vīhāve sāntu sarva īndravatō maruto viśpūr agnīḥ
māmāntarikṣam urulo[9]kam astu mahyām vītah pavalām kāmē
osmīn. mahyām yajantām sama yā[10]nīgnākūtis satyā manaso
me astu | yono mā ni gām̄ kātāmā cañahām [11] viśve devā abhi
rakṣantu mām̄ iha | mahyām devā īdravīnam ā yajā[12]ntā
zamāśīr astu mama devahūtīlī dālivā hotōras sanīśām na etā[13]r
ariṣṭā syām̄ fanvās mūrīrāh devīh sad̄ urvīr anuras karā | tha
vi[14] viśve devīssā iha mādayadhvām mā hasmahi prajoyā mā

dhanena mā [15] dadhāmo dñhisate soma rājan. uruvyacī no
 mahisāś śarma yośha[16]d asmin vālo puruhūtaś purukṣas sa
 nah | prajāyāi haryasva mṛdaye[17]ndu mā no rīriṣo mā
 parū dāh | dhātā vīdhartā bhuvanasya yas pati[18]s savitā
 devo bhimātiśāhū vṛhaspatir īndrāgnī aśvīno[1.76b1]bhā devā
 pāntu yajamānām nirṛthā yāhavāncam ati hvoyār īndraś [2]
 jāitrāya jetave asmākam astu varno yataś kṛnotu vīryam |
 arvā[3]ścam īndram avatām havāmahe yo gojīd dhanajīd
 aśvajīd yah imam [4] no yajñām vīhave jūṣasvāsmākam kṛnvo
 hōrīvo medīnām tvā | trā[5]tāram īndram avatāram īndraś
 have-have suhovām śūram īndraś huvema [6] śakram puruhū-
 tam īndraś svaste no maghavān u pātv īndraś tisrō devī[7]r
 māhi me śarma yan prajāyāi mē tanva yai ca puṣṭam | mām
 vīṣas sāmī[8]naso jūṣantām pitryam kṣattrīm pṛta jānātū
 asmāt. yo naś cakrābhi[9]manyunendramitro hi jīghāśasati |
 tam tvām vṛttrāhān jahi vas sa [10] smadhyam ā bhara | ye naś
 īpaṇty upa te bhavaṇtv īndrāgnibhyām opa bā[11]dhāma
 yonim. dīityā rudrā uparisprē mām ugrom cettā[12]ram
 adhīrājām akraṇ. z - 4 - z

Read: māmāgne varo vihāveṣ astu vayañt tvendhānās
 tanvāñt puṣṭem | mahyāñt namantām pradiśāe catasras tvayā-
 dhyakṣena pṛtanā jayema z 1 z agne manyūñt pratimudan
 paresām tvāñt no gopāś pari pāhi viśvatah | spāñco yantu
 prabudhā durasyaovo 'māśām cittāñt bahudhā vi naśyātu z 2 z
 mama devā vihāve santu sarva īndravanto maruto viśṇur agnīḥ
 | māmāntarikṣam urulokam astu mahyāñt vātāh pavatāñt kāme
 asmin z 3 z mahyāñt yajantāñt mama yāniśākūliś satyāñt manaso
 me astu | eno mā ni gāñt katamae canāhāñt viśve devā abhi
 rakṣantu mām iha z 4 z mahyāñt devā dravīñam ā yajantāñt
 mamaśār astu mama devabūtīñt | dāvā hotāras sanīṣan na etad
 arīṣāñt syāma tanvāñt suvīrāñt z 5 z devīñt ṣad urvīr uru naś karā-
 tha viśve devāsa iha mādayadhyam | mā hasmahi prajayā mā
 dhanenāt mā radhāma dvigate soma rājan z 6 z uruvyacī no
 mahisāś śarma yośhad asmin have puruhūtaś purukṣuḥ | sa
 nah prajāyāi haryasva mṛdayendra mā no rīriṣo mā parū dāh
 z 7 z dhātā vīdhartā bhuvanasya yas patiś savitā devo 'bhimā-
 tiśāhū | vṛhaspatir īndrāgnī aśvīnōbhā devās pāntu yajamānām
 nirṛthāt z 8 z iħārvāñcam ati hvaya īndraś jāitrāya jetave |
 asmākam astu varno yataś kṛnotu vīryam z 9 z arvāñcam īndraś
 avāñcam havāmahe yo gojīd dhanajīd aśvajīd yah | imam no

yaññānū vihāve juṣavāsmākānū kṛmī harivo medinānū tvā z 10
 z trāśāram indram avitāram indram have-have suhavañū śūram
 indram | huvema sakram puruhūtām indram svasti no magha-
 vān u pātv indrah z 11 z tisro devīr mahi me śarma ynechan
 prajāyāi me tanve yae ca puṣṭam | mānū viśas sañmānusso
 juṣantām pitryām kṣatram prati jāñātīv tasmāt z 12 z yo naś
 śakrābhimanyunnendrāmitro hi jighānsati | tamū tvañū vetrāhā-
 jahī śavas so 'smabhyam ā bhara z 13 z ye naś sāpatnāy apa te
 bhavantv Indrāgnibhyam apa bādhāma enān | adīyā rudrā
 uparispryo mām ugrānū cettāram adhīrūjam akrañ z 14 z 4 z

The ms. corrects to dv (īgate) in 6 d.

In 2d and 4a we seem to have only graphic errors, and I have given the readings of S; again in 7b vāte of our ms. seems impossible and I have read with S. TB. 2. 4. 3. 2 has our st. 9 with kevalah for varno and without pādā d. In 10a by reading avāñcam I have kept close to the ms. Our st. 11 = S. 7. 86. 1. In our 14a S and other texts have ye nah sāpatnā²; our form is perhaps too recent to be a real variant.

5

(cf. MS. 2. 13. 15)

[f.76b12] prthivī vaśā sā a[13]gnīm garbhām ca dadhe so
 mānū pāhi tasyāi te vidheyām tasyāi te namas ta[14]syāi te svāhā
 | antarikṣām vaśā sā vāyūm garbhām dadhe dyūr vaśā [15] kī
 sā sūryām garbhām rg vaśā sā sāma garbhām vid vaśā sā kṣattri-
 [16]yañū garbhām | daksinā vaśā sā yajñīyām garbhām vāg vaśā
 sā pa[17]rameśṭhīnām garbhām | vaśā vaśā sā rājanyaām garbhām
 sunā vaśā sā [18]sañvatsarām garbhām dadhe | so mānū pāhi
 tasyāi te vidheyām tasyāi te namas [f.77a1]s tasyāi te svāhā z 5 z
 anu 1 z

Read: prthivī vaśā sāgnīm garbhām dadhe | so mānū pāhi
 tasyāi te vidheyām tasyāi te namas tasyāi te svāhā z 1 z antari-
 kṣām vaśā sā vāyūm garbhām dadhe | so * * * * z 2 z
 dyūr vaśā sā sūryām garbhām dadhe | so * * * * z 3 z rg
 vaśā sā sāma garbhām dadhe | so * * * * z 4 z vid vaśā sā
 kṣattrīyām garbhām dadhe | so * * * * z 5 z daksinā vaśā sā
 yajñīyām garbhām dadhe | so * * * * z 6 z vāg vaśā sā
 parameśṭhīnām garbhām dadhe | so * * * * z 7 z vaśā vaśā
 sā rājanyaām garbhām dadhe | so * * * * z 8 z samī vaśā sā

saṁvatsarāṁ garbhāṁ dadhe | so māṁ pāhi tasyāi te vidheyam
tasyāi te namas tasyāi te svāhā z 9 z 5 z anu 1 z

6

[f.71a1] *sapta sūryā dicam anupravi[2]ṣṭā tān patkenān
gyatū daksināvān tasmāi sarve ghṛtam ātapanīrjām [3] duhā-
nānupasphurantā*

This stanza appears TA. 1. 7. 4. In b read tān and stu
daksināvān: in c te 'smāi, in d duhānā anupasphurantah.

ātapanī kṣīdanīyā ca savyādhi niṣṭapanī adhō[4]yat tapattrā
sūryā udayad vṛhatīr anu |

For pādas ab a probable reading is ātapanī kṣīdanīyā yā ca
savyādhi niṣṭapanī; in c we may read tapatu.

āt pitū pitrūn vidma damvūn i[5]niṣṭastā vayām guhāyan ye
sūryā svadhām anu carantu te |

Pāda a lacks a syllable, so I would read āyat pitā; the ms.
corrects damvūn to dasyūn, but I incline to think that śamyūn
would be better; I can make nothing out of the pāda. For cd I
think we may read guhāyan ye sūryās svadhām anu carantu te.

idyās sa[6]terevorān janāsah pañca tye puro divā kṣiyanti
| tān vṛahma de[7]vām vṛhad ā vivesā tān praveda pracaram
adhiryatā |

In pāda a only janāsah is clear to me; in b read divā kṣiyanti.
In c read dāivām; in d praecaram adhriyata might
be possible.

yo dadāti [8] yo yajate yam dhīnaś śraddhadhāno dhatte |
yamo vāivasvatānū rājā [9] sarvān ukṣatu savadhiḥ |

In b read yo dīnaś; I think yo is better than yam. In c read
"vato anu; at the end of d I would suggest śavadhiḥ.

sū vidhān paryāyāno yo daksinā[10]s pari muṣṇanti dhattām
| sugāna tān pathā sarvān yamo rājāti [11] nayasat. |

For a read mā vidhān paryāyāno, in b ye 'daks' and dhātum:
in c read saganān tān, in d neṣat.

yena pathā vāivasvato yamo rājā yayū | agnir nas te[12] na
netu prajānan vāiśvānarāṣ pathikṛd viśvagrastih |

In b read yayū, in c nayatu, in d vāiśvānarāṣ.

uahi jyo[13]tin nihata martyesv ena devāso ataraṇu arāti |
tenemāmī setum ati [14] gesma sarve vāśvānaram jyotir amūha
devāḥ |

In a read jyotir nihitam martyesu; in b yena and arāti.

ud vayan tamasas pari jyo[15]tiḥ paśyanta uttarām | devauṁ
devatrā sūryam aganma jyotir uttamām |

In a read vayaṁ, in b and in d uttarām. This is S. 7. 53. 7.

āroko[16]bhrājus pabāras patañgas svarnaro jyotiṣmān
vibhāsa tasmāi sa[17]rve ghṛtam ātapatorjaṁ duhānānapa-
sphurantah z 1 z

Read: īrogobhrājus paṭāras patañgas svarnaro jyotiṣmān
vibhāsaḥ | te asmāi sarve ghṛtam ātapantürjaṁ duhānā anapa-
sphurantah z 10 z 1 z

This stanza appears TA. 1. 7. 1.

7

(S. 4. 15)

[1.77a17] sam utpata[1.77b1]nūtu pradiśo nabharmati sap-
trāni vātajūtāni yanti | mārṣabhaṣya nūdato na[2]bharvato
vāmrāpha pṛthivīn tarṣayantu | samīkṣad viśvag vāto nāpāṇey
apāni [3] vegāsah | pṛthīg utpalantu | varṣosya svargū māyantu
bhūmīm pṛthīg jāya[4]nītām oṣadhyo viśvārūpāḥ abhi krama
stanayāndayodadhiṁ bhūmīm parja[5]nya poyasā samagdhi |
tayā varṣam bahulam eta sr̄ṣṭas īmāreṣī krama[6]guleyatāstham
udīroyalo marutas samudratos tveśārkāna | bhūtāpāla[7]yantu
pravṛṣoyanti tamīṣā sudānava pām rasīr oṣadhi sacantām | [8]
janāś topa gāyantu mārūtās parjanya ghoṣīmāz pṛthak. | svargā
[9] varṣasya varṣalus sr̄jantu pṛthivīm anu | sam avantu sad-
navotsāja[10]garā uta | vātā varṣosya varṣalus pravahantu
pṛthivīm anu | vālo [11] vīdyud abhram varṣam samavaṇ snādhā-
navoh pṛū pyāyasva pra pitṛsva mām bhū[12]mūm payasā sr̄ja
| apām agnis tanūbhīs saīvidāno yo odhīnām a[13]dhipo
bābhūva | sa no varṣayām vāinutām jātavedas prāṇam prāṇam
prajābhyo a[14]mṛtaṁ divas pari | om̄ prāṇam prajābhyo
amṛtaṁ divas pari | īmā[15]m īsām vi dyotatām vātāvāntu dīśo
dīśāḥ morudbhīṣ pralayutā [16] meghā varṣantu pṛthivīm anu |
prajāpatīs solilād ā samudrād ā[17]pirayām idadhīm ardayātī
| prāpyāyatām viśno ṣvasya neto | arvā[18]n̄ etena stanayitnu-
nchy apo niśīñcan asuras pitā nah svasantu ga[19]rgarūpām ava-

nicir apo srja vantu pr̄ṇibhavo māndūkā r[1.78a1]nānu |
 samvatsarām śaśayānā vr̄ahmanā vr̄atācārināḥ | vātām parjanya-
 [2] jinavatām. | pra māndūkā avādiṣuḥ upapravada māndūki
 varṣam ā [3] veda tāndhuri | madhye hradasya playasva vīṛhya
 caturaś padah mahāntam ko[4]śam utajābhi sūnca sāvidyutam
 bhavati vātu vātāḥ tanvatām yajñam bahu[5]dhā visṛṣṭam
 ānirdinīr oṣadhyo bhavantu z 2 z.

Read: sam utpatantū pradiṣo nabhasvatih sam abhrāni vāta-
 jītāni yantu | maharṣabhasya nadato nabhasvato vīśrī ūpah
 pr̄thivīnī tarpayantu z 1 z samikṣayad viṣvag vāto nabhānṣy
 apām vegāsah pr̄thag utpatantu | varṣasya sargā mahayantu
 bhūmiṁ pr̄thag jīyantām oṣadhyo visvarūpāḥ z 2 z abhi kranda
 stanayārdayodadhīm bhūmiṁ parjanya payasā samāndhi |
 tvayā varṣam bahulam etu sr̄ṣṭam āśurāsi t̄kramagul etv astam
 z 3 z udīrayata marutas samudrataś tveśā arkā nabha utpātaya-
 ntu | pra varṣayantu tāvīśā sudānava 'pām rasina oṣadhiḥ
 sacantām z 4 z gaṇīa tvopā mārutiś parjanya ghoṣīṇāḥ pr̄thak |
 sargā varṣasya varṣatas sr̄jantu pr̄thivīm anu z 5 z sam avantu
 sudānava utsā ajagārū uta | vātā varṣasya varṣatas prāvantu
 pr̄thivīm anu z 6 z vāto vīdyud abhrāni varṣam sam avantu
 sudānavaḥ | pra pyāyasva pra bibhr̄ṣva sam bhūmiṁ payasā
 sr̄ja z 7 z apām agnis tauñbhiś samvidāno ya oṣadhiṁ adhipo
 babbhūva | sa no varṣam vanutām jītavedikṣ pr̄ānaḥ prajābhyo
 amṛtaṁ divas pari z 8 z āśām-āśām vi dyotatām vātā vāntu
 dīśo-dīśah | marudbhiḥ prācyntā meghā varṣantu pr̄thivīm anu
 z 9 z prajāpatis salilād ā samudrād āpa irayam udadhim
 ardiyātī | pra pyāyatām vīśu 'śvasya reto arvāḥ etena siana-
 yitnumehy apo niśīcann asuras pitā nah z 10 z śvatasīn gurgurā
 apām ava nīcīr apah sr̄ja | vadantu pr̄śībāhevo māndūkā Irinānu
 z 11 z samvatsarām śaśayānā vr̄ahmanā vr̄atācārināḥ | vātām
 parjanyajinvitām pra māndūkū avādiṣuḥ z 12 z upapravada
 māndūki varṣam ā veda tāndhuri | madhye hradasya playasva
 vīṛhya caturaś padah z 13 z mahāntam kośam udajābhi sūnca
 sāvidyutam bhavati vātu vātāḥ tanvatām yajñam bahudhā
 visṛṣṭam ānandinīr oṣadhyo bhavantu z 14 z 2 z.

In 2a I have tried to keep close to the ms.; but the reading
 given by the ms. may be only a graphic variant of the S form.
 In 3d we might well read with S kr̄śagur. The form given for
 4b is Whitney's suggestion. The evidence of our ms., though
 slight, supports the reading of 10e with st. 10.

8

(S. 4. 6)

[f.78a5] yāvati dhyā[6] vāprthivi vavirimnā yāvad vā sapta
 sindhavo vicasphuh vācam vīṣasya [7] dūṣanīm tām ito nīr
 avāriṣam | suparnas tvā garutmān vīṣa prathamam ā[8]dayat.
 | nāropayō nāmādayotāśmābhavān pituḥ yām cāṣṭṛta[9]t pañcā-
 agulir vākṛā cīd alī dhanvinah | apaskambhasya bāhvo[10]n
 nīrvocam aha vīṣam z śalyād vīṣam nīrvocam āñjanāt parṇadher
 uta | [11] apāñjhāś chṛgalāt karmalān nīrvocam aha vīṣam |
 ramaz tveko śalyo [12] uto te rasam vīṣam z utārasasya vrksasya
 dhanus te ramārasam. ye pi[13]yāṣān ya dusyan pāmyān neva-
 cūṣjān | sarve te vadhrayas sāntu vadhrir vi[14]yagiriṣ kṛtā |
 vadhrayas te khanitārō vadhrī tvam asy oṣadhe | vadhrīva
 pa[15]rvato giri yato jātam idam vīṣam. vād idam vārayātāi
 varunātā[16]bhr̥tām | tatrāmyātasyāśiktām tāc cakārārasam
 vīṣam. z 3 z

Read: yāvati dyāvāprihīvī varimnā yāvad vā sapta sindhavo
 vīṣathuh | vācam vīṣasya dūṣanīm tām ito nīravādiṣam z 1 z
 suparnas tvā garutmān vīṣa prathamam ādayat | nāropayō
 nāmādaya utāśmā ūbhavān pituḥ z 2 z tām cāṣṭṛtāt pañcāñgu-
 lir vākṛā cīd adhi dhanvinah | apaskambhasya bāhvo nīrvocam
 aha vīṣam z 3 z śalyād vīṣam nīrvocam āñjanāt parṇadher uta
 | apāñjhāś chṛfgūt kūlmalān nīrvocam aha vīṣam z 4 z arāsa-
 ta iṣo śalyo 'tho te 'rasam vīṣam | utārasasya vrksasya dhanus
 te 'rasārasam z 5 z ye 'pīpiṣān ye 'dusyan ya āṣyan ye
 'vāṣrjan | sarve te vadhrayas sāntu vadhrir vīṣagiriṣ kṛtā z 6 z
 vadhrayas te khanitārō vadhrī tvam asy oṣadhe | vadhrīs sa
 parvato giri yato jātam idam vīṣam z 7 z vār idam vārayātāi
 varunād ūbhṛtām | tatrāmyātasyāśiktām tāc cakārārasam vīṣam
 z 8 z 3 z

The margin suggests serve te in 6c.

In 2d abhavas, in accord with 8, would be smoother. In 3a
 I suspect we have only a corruption of the reading of 8 yaś ta
 āṣyat; but possibly a form of str is the verb. Our st. 8 is S
 4. 7. 1; the form suggested for our pāda b is not satisfactory,
 and something like vāraṇāvātyā ūbhṛtām would bring it in
 accord with 8.

9

[f.78a16] *khā[17]direṇa śolalenātho kañkatadañtyā | altho
viṣasya ynd viṣam tena pā[18]mir aninaśam.*

In pāda b we may read kañkatañdantyā; in d read pāpīr.

*kityāś kalaparvanāś sahasrākṣena śarmāṇā | [f.78b1] tīkṣṇā-
bhir abhribhir vaya nir adāmāś sadānvā*

In a read kityāś śataparvanas; in cd vayam nir ajāmas sadānvāḥ; the verb is very uncertain.

*māsahāsatyam ida[2]ś kānvā paro nudah māyādhānāgatā yāś
cīha gr̥ṇīś purah*

For pāda b we may read itāś kānvām paro nudah, but for a I see nothing sure; perhaps sadānvām should be the first word having dropped out after sadānvā of st. 2d, and then asatyām might be the last word of the pāda with some form of the root sah before it. In cd we might read māyādhārā āgatā yū yūś cīha jurnīś parah; but this is very uncertain.

*nacā [3] itthā nacā iha vamāsato akṣe va śrīgavaś chirah |
sadānvā vrā[4]kmanas pate tīkṣṇāśrīgodṛṣāṇi ihi |*

The second hemistich is clear here sadānvā vrahmanas pate tīkṣṇāśrīgodṛṣāṇi ihi; cf RV. 10. 155. 2cd. Pāda b we may read akṣe vāś śrīgavaś chirah, which appears also Ppp. 6. 8. 4d. RV. 10. 155. 2a is either itāś eattāmutah, which suggests for pāda a here nīcā itthā nīcā iha vamāmuto.

*vi ten manthāś casire vi tade[5]te agado hi ni dadāu te abhy
agdūś kānve parehy avaram vryne |*

I can offer nothing here except the division of words.

*yāś te[6]nke tīkṣhṇātī vālikē yā prayām khe prayām kha-
yāntī uta yāni ghorū | [7] yā garbhāt pramṛśāntī survāś pāpīr
aninaśam |*

For pāda a yāś te 'nke tīkṣhṇātī yā vālikē might stand; in b it seems that prayām khe is due to dittography and should be dropped, and it might be possible to read yāḥ prayāś kṣiyāntī uta yā nu ghorāḥ. In c read garbhāt pramṛśānti.

*yāś celām vasaṭā u[8]ta yā natta duṣām nīlām piṣāṇgam uta
lohitām yā | yā garbhān [9] pramṛśāntī survāś pāpīr aninaśam*

In pāda a the first word should perhaps be yāś and the last word probably dūṣūm, but further I cannot see: with piśāṅgam and yāś b can stand being practically the equivalent of S. 14. 2. 48b. Read garbhān in c.

yākīdantīr viṣadantī[10]r viṣadantī prāṇūm asyāpi niṣyata | durnāmnis sarvās saṅga[11]tya māmuṣyotsikta kiñ cana z 4 z

Read: tyākīdantīr viṣadantī prāṇam asyāpi nikṣata | durnāmnis sarvās saṅgatya māmuṣyotsikta kiñ cana z 8 z 4 z

There is a proper name ākīdantī which may be in pāda a, but I have thought also of āṅkādantīr. S. 5. 8. 4e is prāṇam asyāpi māhyats.

10

[f.78b11] yāmyā muśalāhatā [12] dviśatapṛṣṭā viśā suta tapur agnis tapor dyūs tapanvān sure bhava vi[13]sañi tvelo akma rohyanī avruvan. |

This seems little more than a series of words, but some corrections at least are evident or possible. Read yāmyā muśalāhatā and probably dviśatapṛṣṭā; perhaps sūta followed by a colon. Next a triṣṭubh pāda can be made out tapur agnis tapur dyūs tapasvān. The rest could be counted as two amṛṣṭubh pādas, reading akma rohyanī.

dviśām kumbhe va srava viśām tōma[14]no sure viśām tvām hastyāhata viśām pratihitā bhava |

Read: viśām kumbhe 'va srava viśām titāmano sure | viśām tvām hastyāhata viśām pratihitā bhava z 2 z

This seems rather unsatisfactory: if sure is vocative then we would expect vocatives feminine in ed. In st. 6b below we have viśām te pāvane sure (sic correci), which possibly is the form intended here.

siñhas te stu ta[15]ndūlo vyāghraṣ pary odanām prajā kūna-sya nakrahur vṛkasya hrdi saṁ[16]sravah |

In a read 'stu tandūlo; in c kūrasya would fit the tone of pādas ab but I can suggest nothing for nakrahur; pāda d seems possible as it stands.

yāmyā pātrā sutiśāspassa kvā viśas pari | varāha [17] manya-rujam nuttāna pāda sandoyah |

I can make no suggestion here.

*udadani pracyavoni a[18]pām subhagā viśas pari | utākhāta
manyurujam nyuta paścāt ta[19]purus krdhi |*

I can make no suggestion here.

*viśam te pavane sure rudhi[1.79a1]raṁ sthāle astu te |
mathnātūv anyo anyasmād iṣudhīgām tād dhanas tvat.*

In a pāvane seems good; in c read mathnātv; in d iṣudhyan would seem possible and dhanus.

*iṣupāvāno [2] rudhirāś carantī pātiro martyās tava ye sumero
| hatāśo anye yodhayañtv anyā[3]s tvam adiśchirah samahimā-
nām surūyā |*

Pāda a seems possible as it stands, taking iṣupāvāno as meaning 'protecting from (†) arrows'; in b perhaps we may read ye 'sum erire. A good pāda c is obtained if we read yodhayanv anye; in d I can only conjecture 'strati dhikṣeran for the first two words, the rest being possibly good with surayā.

*tvāṁ virudho vieravo balena uta pā[4]taya sādaya yodhanā-
yāi | bhinnarin nirbhinnasirṣnā sam r̥śchatām ātmacelo [5] visra-
van te surūpā |*

In pāda a read tvāṁ, in ab balenot pātaya sādhaya and perhaps yodhanāya although yodhanāyāi might possibly stand. For c read bhinnarir nirbhinnasirṣnā sam rechatām; in d visravan te surayā seems possible, but I suspect ātmacelo for which however I can suggest nothing.

*viśosutāṁ pivali ca r̥sāno mastrā samṣrṣjāṁ rudhi[6]rena
miśrāṁ chinnahastaś carati grāme antar virahatyāni bahudhā
panḍ[7]yām |*

For pāda a I see nothing more than the transliteration shows; in b with sasrān and miśrān we would have a good pāda: with panḍyan at the end the last two pādas seem possible.

*asumatim iṣumatis unnayāma sitād adhi | sādhayābhi sāda-[8]
yā harivināṁ pari ropayā | anyo anyasya mośchīṣam. z 5 z [9]
z onu 2 z*

Read: asumatim iṣumatis unnayāma sitād adhi | sādhayābhi sāda-
sādhayā harivināṁ pari ropayā | anyo anyasya mośchīṣam z 10
z 5 z am 2 z

In pāda d possibly we may read arivenāṁ (= enemy's arrow!). In pāda e mośchīṣam is by no means certain.

The intent of this escapes me in spite of some fairly clear hints in st. 2, 6, and 8: and all the suggestions are therefore simply gropings in the dark.

11

[f.79a9] *anu te manyatām agnir varuṇa te anumanyatām | tatas te pu[10]tro jāyatām | sa valghī goṣu yudhyatām idām vāyon ajāñīha yaḍim indra [11] vr̥haspate | āñcanām putravedanām | kr̥ṇas puñsamalan vayam | yenetaḥ pari[12]śabhitām yasmāt̄ putram na vindase | īndrāgnī tasmāt̄ tvenasah pari pāt̄om a[13]hardivī ātharvāṇo aṅgiraso viśve devā ṛtāvrdhah śr̥avante a[14]bhyā me havam aṣyāi putrāya vettave | īndrāṇi varunāni sinīvālī [15] utādītīḥ marutarugrā patnīnām putram abhy anudeṣṭu te | putram te mitrā[16]ruṇā | putram devī sarasvatī | putram te aśvināu devā | ādhattām puṣka[17]rassṛjā | yeṣām ca nāma jagrabha teṣām ca nōpa sāṁsmara | devās te [18] sarve saṅgatya putram cāivātrikām dadhe | ātmanenām nir māmīṣva sa tvat̄ pari [19] jāyatām | tvaṁ bijam urvareva tvaṁ bibharsi yonyām | prthiviṁ saha ya[f.79b1]jñair nākṣatrāis saha śūryah vātās patatribhīs saha putram abhy arideṣṭu te z z {2} z 1 z*

Read: *anu te manyatām agnir varuṇas te anu manyatām | tatas te putro jāyatām sa valghī goṣu yudhyatām z 1 z idām vāyor ajāñīshedam īndrāñd vr̥haspateh | āñjanām putravedanām kr̥ṇas puñsamalan vayam z 2 z yenetaḥ pariśabhitām yasmāt̄ putram na vindase | īndrāgnī tasmāt̄ tvenasah pari pāt̄am ahardivī z 3 z ātharvāṇo aṅgiraso viśve devā ṛtāvrdhah | śr̥avantv abhi me havam aṣyāi putrāya vettave z 4 z īndrāṇi varunāni sinīvālī utādītīḥ | †marutarugrā patnīnām putram abhy anudeṣṭu te z 5 z putram te mitrāvaruṇā putram devī sarasvatī | putram te aśvināu devā ādhattām puṣkarasṛjā z 6 z yeṣām ca nāma jagrabha teṣām ca nōpa sāṁsmara | devās te sarve saṅgatya putram jāivātrikām dadhe z 7 z ātmanenām nir māmīṣva sa tvat̄ pari jāyatām | tvaṁ bijam urvareva tvaṁ bibharsi yonyām z 8 z prthivi saha yajñair nākṣatrāis saha śūryah | vātās patatribhīs saha putram abhy anudeṣṭu te z 9 z 1 z*

The ms. seems to correct valghi in 1d to valmī.

If valgi is an allowable form its meaning would seem possible here. In 2d I think puñsavanam would be a more attractive reading. In 5e we want something like marutām ugrānām patnī

but I do not venture to restore it in the text. With our st. 6 cf. S. 5. 25. 3. In 7b either *nāpa* or *nūpa* might be considered as an alternative to *nopa*. The form *desu* does not seem to be quoted, but is not open to objection, I think.

12

[f.79b2] *vr̥ṣā jajñī madhuvāno yam madhumatibhyah sāu te yonim ā[3]śayām bad dakṣas puruso bhuvan | yonim gaccha madhuvāna yonyām puruso bhava [4] tatah punar nir āyām āśr̥ṇāś śronibhīn nonudat. bānavān ī[5]śudher iva kṛṇvan putror yathāpriyam | śronijo manu antarā daśamāsyā[6]yasi | sa pratyām praty ā vartā ete sāmivatsare punah yathā jīvāsi [7] bhadravābhidhantā mahā bhave | sam te yonim aciklipām suprāja[8]strāya bhadravā | tatra siñcasva vr̥ṣṇyām daśamāsyam abhi vratam. | [9] garbhas te yonim ā śayi garbho jarāyuv āśayām | kumārā ulba[10]m ā śayām tvaṣṭāklipto yathāparuh yathā rājan madhuvānas tam [11] bijam vi rohasi | evā tvam asyā nir bindhi kumāram yonyā[12]dhi | garbhādhāna madhuvāno garbhām devo vr̥haspatih garbhām ta [13] indraś cāgnīś ca garbhām dhātā dadhātu te z 2 z*

Read: *vr̥ṣā jajñī madhuvāno 'yam madhumatibhyah | asāu te yonim ā śayām bad dakṣas puruso bhuvan z 1 z yonim gaccha madhuvāna yonyām puruso bhava | tatah punar nir āyāsi āśr̥ṇā śronibhīn nonudat z 2 z bānavān īśudher iva kṛṇvan putrau yathāpriyam | śronyor manu antarā daśamāsyā īyasi z 3 z sa pratyām praty ā tvartā ete sāmivatsare punah | yathā jīvāsi bhadravābhi bhartā mahān bhaveh z 4 z sam te yonim aciklipām suprājastvāya bhadravā | tatra siñcasva vr̥ṣṇyām daśamāsyam abhi vratam z 5 z garbhas te yonim ā śayi garbho jarāyuv āśayām | kumārā ulbam ā śayām tvaṣṭāklipto yathāparuh z 6 z yathā rājan madhuvāna tam bijam vi rohāyasi | evā tvam asyā nir bindhi kumāram yonyā adhi z 7 z garbhādhāna madhuvāno garbhām devo vr̥haspatih garbhām ta indraś cāgnīś ca garbhām dhātā dadhātu te z 8 z 2 z*

With our 1c and 6ab cf. S. 5. 25. 9b; with our st. 8 cf. S. 5. 25. 4. Perhaps *madhuvāna* (cf. ms. in 7a) is the correct form of this word: I find neither. The forms suggested for 2d, 3b, and 4d are rather uncertain. In 4a probably the verb is *prati* + ā + vrt, and perhaps *vartihā* might stand.

13

[f.79b13] śīva[14]ś śīvābhir vayas tvam̄ saṁ gacchasva tanvā
jātavedah̄ | ratnām dadhā[15]nas sumanāś purastād̄ grhebhyah̄
tvā varcase nir vapāmi pr[16]thīryāṁ ghamā stabbhito antarikṣe
dīrī sratah̄ dyūr enān̄ sa[17]rvatoś pātu yas tvā pacany odanah̄
ye sumudram̄ ayirayaḥ ye [18] ca sindhūm̄ ye antarikṣam̄
prthivīm̄ uta dyām̄, ye vātēna sa[f.80a1]rathām̄ yānti devās tān̄
śpnoty odanah̄ pākātrā rē kumbhī dīlyatām̄ sāmnā [2] pacyato-
danā anśām̄ somasyākām̄ manye vāśvadevam̄ idam̄ havīh̄ ulū-
khale [3] musale yaś ca sūrpe bhūmyām̄ ukhāyām̄ yadi vāsi
sañjā | yā vipuruṣo [4] yā vinirnejanāni sarvām̄ tat te vrah-
manā sūdayām̄ ūrdhvā prehī māpā [5] vyaktā vyarujo anta-
raśah̄ | rakṣānsi sarvā tīrvā yathā rohā divām̄ tvam̄ | turo no [6]
turo bhava saṁ dībhir̄ viyatām̄ oyam̄ saṁ prthivyā saṁ agnīnā
saṁ sūryasya rāśmi[7]su | saṁ devānām̄ apasva | ā ca dviṣa-
sukṛtasya loke | tīrthye nākē [8] adhi rocane divāḥ satyor̄ apadām̄
yopayanto any etā p̄cchāmī kṛtya mṛtyum̄ [9] padayopanena
z 3 z

Read: śīvaś śīvābhir vayas tvam̄ saṁ gacchasva tanvā jātā-
vedah̄ | ratnām̄ dadhānas sumanāś purastād̄ grhebhyas̄ tvā
varcase nir vapāmi z 1 z p̄thīryāṁ ghamas̄ stabbhito antarikṣe
dīrī sratah̄ | dyūr enān̄ sarvatas̄ pātu yas tvā pacaty odanah̄ z
2 z ye sumudram̄ ayirayaḥ ye ca sindhūm̄ ye antarikṣam̄ prthivīm̄
uta dyām̄ | ye vātēna sarathām̄ yānti devās tān̄ śpnoty odanah̄
pākātrā z 3 z rē kumbhī ni dīyatām̄ sāmnā pacyata odanah̄ |
anśām̄ somasyākām̄ manye vāśvadevam̄ idam̄ havīh̄ z 4 z ulū-
khale musale yaś ca sūrpe bhūmyām̄ ukhāyām̄ yadi vāsi sañjāh̄
| yā vipuruṣo yā vinirnejanāni sarvām̄ tat te vrahmanā sūdayām̄
z 5 z ūrdhvā prehī māpā t̄vyaktā vyarujo antarām̄ | rakṣānsi
sarvā tīrvā yathā rohā divām̄ tvam̄ z 6 z turo no 'turo bhava
saṁ dībhir̄ viyatām̄ oyam̄ | saṁ prthivyā saṁ agnīnā saṁ
sūryasya rāśmībhir̄ z 7 z tsām̄ devānām̄ apasva | ā ca dviṣa-
sukṛtasya loke tīrthye nākē adhi rocane divāḥ z 8 z mṛtyoh̄ padām̄
yopayanto any etā p̄cchāmī kṛtya mṛtyum̄ padayopanena z 9
z 3 z

In f.79b-l. 14 the ms. corrects to gacchadhvā.

Pāda a of st. 1 seems to be defective, and the trouble is probably in vayas; vahas comes to mind but hardly improves the pāda. At the end of 3d pākātrā might be a simpler emenda-

tion. With 6a we may compare S. 6. 87. 2a *ihāivāidhi māpa* *eyosthāḥ*; for *vyaktā* perhaps we should read some form of *vyac*. That there are two stanzas after st. 7 I feel fairly confident, but can get no further with them than is indicated above.

With st. 1b cf. S. 18. 2. 10d; RV. 10. 16. 5d. With st. 4a cf. S. 9. 5. 5a. Our 5a appears VSK. 2. 5. 2a and elsewhere with *yac ca*; our 8c appears RV. 9. 86. 27d and elsewhere with *prṣṭhe*. What is given here as st. 9 looks as if it might be a corrupted version of a stanza composed of S. 12. 2. 30ab and 29ed.

14

[f.80a9] *bhūtvā mukham asī satyasya rāśmir uccāi* [10] *śloko* *divam gaccha uśchriyetaṁ havīṣkṛtō | sādhu devān saparyata* [11] *m ajaīśas apa luspatu* |

Reading *bhūtvā* we have a good pāda of eleven syllables; in b I would read *uccāiśloko*, in c *havīṣkṛtāu*; in d *saparyatām* is probable; the last pāda, in which *luspatu* is the only possibility which suggests itself, perhaps does not belong here.

āpo devir yajñākṛtah śukra devīn havi[12] *śkṛtah ekapātra-*
dano agniṣṭomena saṁmyata |

Read: *āpo devir yajñākṛtah śukra devīn haviṣkṛtah ekapātra-*
dano agniṣṭomena saṁmyata z 2 z

Pāda c would be improved by reading *ya eka*”.

gāyatri havyavā[13] *d asī devatāgnis sam idhyase | sahasra-*
dhāraṁ sukṛtasya loka ghr[14] *taprṣīham amattyuh*

This is all correct except the last word for which *mamadyuh* would seem possible.

tapaś ca satyam cūdanām prīśitām paramesṭhināu tā-[15]
bhyām vāiśvarūbhṛtām tenādhipatir ucyase |

Read *vāiśvānarā*” in c; with this the stanza seems correct.

udagāyo śivāyoh | [16] *prāṇena samyata | apa vrprāṇimaj-*
jahy

Out of this I get nothing: it seems to represent st. 5, for the rest of the material divides readily into three stanzas.

apa kṣīya duritam a[17] *hāī | apa rakṣānsi tejasā | dovebhyo*
havyam arecatām vyacavān supra[f.80b1] *thā sa hi* |

In a *kṣīye* seems possible; in d read *suprathīś*.

uiscāis suporno divam ut patāsundriyai devesv ākravana
r̥ī[2]bhyāḥ pari-dehi mām iukram iukreṇa bhakṣyām pīvantu
sukrto madhu |

In a read nečāis, in ab patāsundriyai, in d bhakṣyām pīvantu.

dva[3]yā devā tapano yajñām ākur yān odano dvīṣade yāñś
ca pr̥ṣṭhāḥ ḥ[4]dityāñgirāsas svārgam imām prāśnantu rtubhīr
niṣadya z 4 z

Read: dvayā devās tapanām yajñām ākur yān odano t̥dvī-
ṣade yāñś ca pr̥ṣṭhāḥ | ādityā añgirāsas svārgam imām prāśnantu
rtubhīr niṣadya z 8 z 4 z

For dvīṣade in b viṣate would seem rather good, and pr̥ṣṭhyam
might be better than pr̥ṣṭhāḥ. In a tapanām might be better.

15

[f.80b5] pīyāsasya kṣirasya surpiśo anyasyāgram sāmbharā-
metat. etabhā*ām[6]s ahutādo anyo vāśvadevajī havīr ubha-
yām saimcaranti |

For pāda b read annasyāgram sambharāmy etat. The first
word of c is probably yathābhāgam, and anye should be read for
anyo; the last pāda can stand, although Kāś. 73. 14 has ubhaye.
It is possible that what stands here as pāda c is a corrupt
abbreviation of Kāś. 73. 14ab.

te samyañca [7] iha mādayantām isam ūrja yajamānāya
matsva me sma bhavo mā [8] śarvo vadhiś grāmā vatsān kromo-
īrayo vadañna |

With ūrjātā pāda b might stand, being a variant of S. 18. 4.
4d; but Kāś. 73. 15 has a as here, and in b yajamānā yam
icehata, which probably should be read here. In c read mo sma;
d should probably begin grāmyān vatsān, but I can get nothing
out of the rest of it.

ye jātā ye ca garbhe[9]ṣe antar arīṣṭāgnes tanum ārabhantām
imā gāvā vijāvatiś prajūvatiś [10] striṣva saimmano bhavantu |

The meter would be much improved in a by ye ca jātā; in b
read arīṣṭā agnes tanyam. In c read prajūvatis, and for d striṣu
saimmano bhavantu. The two hemistichs do not hang together
very well.

ā sabhāumāu api pr̄chānti devī sām̄vatsa[11] rāyusā sedasā
saṁs̄r̄jāmi v̄ra viyantām̄ striyo gāvo viṣṇur̄ yo [12] ryōnim̄ anū
kalpayāti |

Read: ā sabhāumān̄ api pr̄chānti devās sām̄vatsarāyusā
medasā saṁs̄r̄jāmi | pra viyantām̄ striyo gāvo viṣṇur̄ yo yonim̄
anū kalpayāti z 4 z

*pratigr̄hūtir̄ vr̄sabhasya reta uksū[13] nadvāns̄ carati vādyā-
tām̄ anū | pr̄eram̄ agrām̄ na hinasti kiñ cana ya[14] thākāmām̄
kr̄nuta somyam̄ madhu |*

In a we may probably read *pratigr̄hātī* *vr̄sabhasya*, in b
v̄śitām̄. In c perhaps *pr̄eram̄* might stand, but *pr̄eram̄* would
seem better.

*sōdūr̄ yajñas ahutādo naya[15] nūtā rāyas posā yajamānam̄
sajaulām̄ | ni te prathām̄ pr̄thivi yo[16] nūtū sindhavo yad̄ osa-
dhaya nihitām̄ predatām̄ irām̄.*

In a we may perhaps read *sādhur yajñas* *sa hutādo* *nayatu* ;
in b read *sacantām* (= 8. 2. 34. 1d). In c read *pr̄thivīm̄*, in d
nihitām̄ *predatām̄* *irām̄*.

*parjanyasya [17] maruto dadhiyānsān̄ vāta bhadraṇ̄ sasyam̄
pacyatām̄ modatām̄ jagat̄. | [18] saptarṣayas sapta svarānsy
esām̄ septa kṣayo śvinoh̄ |*

For *dadhiyānsān̄* *vāta* I can suggest nothing plausible; nor for
kṣayo; after which read 'śvinoh̄'.

*pañca vājā pr̄ā[1.81a1]no vyāno manākutir̄ vāḡ devī devebhyo
haryām̄ vahatu prajānān̄.*

Read *vājāh* and *manā* *ākūtir̄*, with colon after *devī*; this can
be read as two eight-syllable pādas. Read *prajānān̄*.

*ye ca dr[2]ṣṭā ye cādr̄ṣṭās krimayaś kikr̄ṣāś ca ye | teṣām̄
śirānsy asinā śchi[3] nadmi yathā sām̄vatsarāyusā medasā
saṁs̄r̄jāmi z 5 z [4] z anū 3 z*

Read: *ye ca* *dr̄ṣṭā* *ye cādr̄ṣṭās* *kr̄mayaś* *kikr̄ṣāś* *ca ye* | *teṣām̄*
śirānsy *asinā* *śchi*³ *nadmi* *yathā* *sām̄vatsarāyusā* *medasā*
saṁs̄r̄jāmi z 5 z [4] z *anū* 3 z

16

[1.81a4] *dyāuś cemān̄ yajñān̄ pr̄thivi ca sandahātām̄ mā[5]
tarīvā pavamānaś purastāt̄. tvāṣṭā vāyus saha somena vāta
i[6] man̄ suā duhur̄ ḫapaspurāntah̄*

In a read sanduhātām; in d read ana^a: for pāda a see TB. 3. 7. 4. 15.

gharmām tvapānv amṛtasya dhārayā devebhyo [7] havyam
paride savitre | śukram devāś śrutam ajanlu havyam āśam
juhvā[8]nām amṛtasya yonāu |

In a read tapāmy, in b paridām, in c śrtam adantu, in d juhvānam. These corrections bring the stanza in accord with Vāit. 14. 1.

ud vāsayāgne śrutam akarma havyam ā roha [9] pṛsthām
amṛtasya dhāma | vanaspatayā upa bṛhi strñita madhvā sa-[10]
matū ghṛtavat karūha z'3 z

Read: ud vāsayāgnes śrtam akarma havyam ā roha pṛsthām
amṛtasya dhāma | vanaspatyā upa bṛhis strñita madhvā sama-
ñkha ghṛtavat karūha z'3 z

For pādas ab cf. Kāuś. 2. 37; for d cf. Kāuś. 2. 36.

yopśi yaksmaś kāmāyāmī tam vorja gavyūti[11] yam kām
anajmī yetām tam nām kṛi kṣiram avīthām nāś kṛṇomy anāśam
tayanto [12] pīyūthām etāḥ

If yopśi may mean 'hurtful' it may stand; at the end of pāda a read tam va; for b ūrjām gavyūtiūm sam anejmī etām. Just above tam, at the beginning of c, the ms. interlines a correction ktā, but I can make nothing of the first part of the pāda: read avīthām for avīthām. For d it seems possible to read anāśam dayante pīyūthām etat.

idānām pitā uta pitnyāyānām payo dhayānta a[13] hūniyamā-
nah | rtubhis sasyam uta kliptam astu yo gopā raksatu vā[14] yur
ena |

In a pitā seems a probable reading, and pitnyānām; in b read dhayānta abhnyāyānāḥ; in c kliptam; at the end of d enāḥ may be possible.

pīvata ghṛtam yata dhāvayed guhā yatām nīkhatām mānuṣēṣu
| [15] viśve devā vīśvadevasyāgnāu yathābhāgo hariṣo māda-
yadhvām |

In a read pīvata, and perhaps yato or yatra; with nīkhatām pāda b would seem good: in d read yathābhāgām.

yo [16] devānām asi śreṣṭha rūdras tvānticaro vṛṣā | arīṣa-
smākam cīrī me [17] tad astu hrītām tava |

In b read tanticaro; in c arīṣṭā asmākam; in d read hutām for hṛtām, and unless medad can stand as the first word of d I can see nothing. Pāda a appears MS. 1. 3. 4. 3, and pāda b TB. 3. 3. 2. 5.

pūrṇam aham karisānam | śatavantam sahasrinam vi-[f.81b1]
ivēbhīr agne devāir imam goṣṭhamām durha z 1 z

Read: pūrṇam mahām karisānam śatavantam sahasrinam |
viśvēbhīr agne devāir imam goṣṭhamām dṝ̄ha z 8 z 1 z

This stanza as emended is not satisfactory; I have tried to bring it into the general sphere of the first six stanzas, but that may be a mistaken effort.

17

(S. 6. 111 with additions)

[f.81b1] devāīngasūd unmādi[2] tam kṣetriyāś chapathār uṭa
| muñcantu tasmā tvā devā unmattam rakṣa[3] sas pavi z

For b read kṣetriyāś chapathād uta; in c tasmāt, in d pari. Our a and d are S. 3ab.

muniñ bhavantam saryāni vāvṛto rakṣāns; aknu ulā ka-[4]
nikrati | atas tam no adhi pāhi vājinn indrena medī vr̄hate [5]
ranāya |

The first two words of a are probably sound; for the next word paryāne might be possible, followed by some form of vṛt. In b only the first and last words seem good: I can get no idea of the intent of the first two pādas.

yathāgne devā r̄bhavo maniṣinom unmattam asrjany are-[6]
nasah eva te śaktre abhayam kṝṇotu muñcasvāinaso vi nayāni
rakṣah [7]

In ab we may probably read maniṣino 'mum unmattam asrjann īra enasah. In e read śakro, in i nayāni.

yathā gāvāś ca bhūmyāni puruṣūśvinya okasah yavonmalasya
te mu[8]ne sa yṝkātū pr̄thivim anu |

Read gāvāś in a; for b the only suggestion I have is puruṣāś cīnvanty. In e read evon*, in d perhaps sam or sa.

muniñ dādhāra pr̄thivi muniñ dyōu[9]r abhi rakṣati munī-
yām hi viśvā bhūtāni munīm indro adidharat. | [10] parū rakṣa
svāmī te |

Read: munim dādhāra prthivi munim dyāur abhi rakṣati | munim hi viśvā bhūtāni munim īdro adidharat | parā rakṣas
suvāni te z 5 z

With the last pāda cf. §. 4. 13, 5d, which has yakṣmāni.

imāni me agne purusāni samugdhi yā vibhō grā [11] hyā lalāpiti | utodite kṛnavarbhāgadheya munim mudito. [12] agado yathāsat. |

Read: imāni me agne purusāni samugdhi yā vibhādho grāhyā lalāpiti | atho 'dhi te kṛnavad bhāgadheyan anumūnidito ugado yathāsat z 6 z

agnis te na śasayatu yot te unmana uddhṛtam ju [13] homi
vidvāns te havir yathānamudito bhava |

Read: agnis te ni śamayatu yat te tan mana uddhṛtam |
ju homi vidvāns te havir yathānamudito bhava; z 7 z

punas tvā tur apsaras pu [14] nar vātay punar diśah punar
yamas punar yamasya dūtās te tvā muñcas [15] nte añhasah |
jīvātave na martave atho arisṭatātaye |

Read: punas tvā dur apsarasas punar vātay punar diśah |
punar yamas punar yamasya dūtās te tvā muñcas tvātāv
jīvātave na martave atho arisṭatātaye z 8 z 2 z

18

(§. 4. 13)

[f.81b15] uta de [16] vā arahitān devā uddharatā punah tato
manusyam tuā devā dāivas kr [17] nuta jivase | ā tvāgamanān
śāntatātibhi atho arisṭatātibhi [18] daksāni te bhādram ḥriṣam
parā mūrāsy ānaya tu. dvāv imān vātān vā [f.82a1] tu ā sindhor
ā parāmatāh daksān te anya ā vātu parānyo vāta yad rapah | [2]
ā vāta vāhi bhesajām evi vāta vāhi yad rapah tvān hi viśvabhe-
ṣajo [3] devānām dūta iyase | trāyantām imāni devās trayantām
maruto gañāh [4] trāyantām viśvā bhūtāni yathāyam agado
satī | gṛtena dyāvā [5] prthivi gṛtenāpas samukṣatā | gṛtena
muśvāvānās yad ā tvā [6] kṛtam dhṛtak ayam me hasto bha-
gavatīrak ayam me viśvabhesajo yam sī [7] vābhīmarśanah
hastābhīyām dasāśākābhīyām jihvā vātās purogavī | hanāma-[8]
yatnubhīyām samvubhīyām tvā abhimarśāmāsi | āpa id vā u
bhesajā tās te [9] kṛṇavantu bhesajām z 3 z

Read: uta devā avahitām devā ud dharathā punāḥ | uto mānu-
ṣyam tānī devā dāivīś kṛnuta jīvase z 1 z ā tvāgamaṁ Saṁhitā-
tibhīr attho arīṣṭatātibhīḥ | daksām te bhadrām śābharsām parā-
sūvīkṛyā anayaṁ te z 2 z dvāv imāu vātā vāta ā sindhor ā parā-
vataḥ | daksām te anya ā vātu parūṇyo vātu yad rapaḥ z 3 z ā
vāta vāhi bheṣajāḥ vi vāta vāhi yad rapaḥ | tvām hi viśvabhe-
ṣajo devānām dūta īyase z 4 z trāyantām imām devās trāyantām
maruto gauṇāḥ | trāyantām viśvā bhūtānī yathāyam agado 'satī-
z 5 z gṛhṭena dyāvāpṛthīvi gṛhṭenīpas samnksatā | gṛhṭena
mūnīrasvāīmaso yad ā tvā kṛtam ahrthāḥ z 6 z ayaṁ me hāsto
bhagavān ayaṁ me bhagavāttarab | ayaṁ me viśvabheṣajo 'yām
śivābhīmarśanāḥ z 7 z hāstābhīyām daśāśkābhīyām jīhvā vācas-
purogavī | anāmāyitnubhīyām śāmīlubhīyām tābhīyām tvābhī-
mrśāmīni z 8 z āpa id vā n bheṣajīr āpo amivacātanīḥ | āpo
viśvasya bheṣajīs tās tvā kṛnyantu bheṣajām z 9 z 3 z

In 2c our ms. seems to point toward the form which most of the ms. of S have: the form given for 2d is close to the form in S, *parū yakṣmān svabhāvī te*. St. 6 has no parallel: st. 9 varies only in *pāda* d from S. 3, 7, 5 (= Ppp. 3, 2, 7); the similar endings of *pādas* a and c account for the omission of b and c.

19

(S. 3, 30)

[f.82a9] sahṛdayam sōmnasyam avidvesam kr̄no[10]mī vah
 anyo nyam abhinnuto vatsam jōtam iuāghnyā anurataś pituś
 putro mātrā [11] bhavati sunnataḥ jāyā patye madhumatim
 vācam vādatu sāntivām | mā trā[12]tā bhr̄tārām dhukṣa mā
 svasātām uṣa svasā | samyoñcas sueratā bhūtvā vācam va-[13]
 datu bhadrayā | yena devā na vīyantī no ca vidvīṣate mithah |
 tat kr̄no[14] vr̄ahma vo gyke sāñjīvānam pūrusebhyah jāyo-
 svrntas cittano mā vi yāñścas sāmnā[15]dhayantas sudhīrā
 carantah anyo nyasmāi valgū vadantu yaca samagrāśha sa-[16]
 dhīrīcīnāi sāmāñi prupā suha vo nyabdhīgas sāmānyokte suha vo
 yuno[17]jmi samyoñco gnyo saparīyātādā nābhīm iuābhītā |
 yena devā ha[f.82b1]vīśo yajatrāpā pāpmānam āpnuta | kro-
 dhaṁ manyum rtām bhāgām duruktam cō[2]canam. | rejmati
 nī dādhamasi | sadhīrīcīnāi nas samanasesz kr̄nomy ekasū[3]ni-
 sīyām sāmīvānānena sāmīhrda | devā yaved amṛtaṁ rākṣasānās
 sdyām [4]prātās susamitir vo stu z 4 z

Read: sahṛīṣayām śāṁmanāṣyām avidveṣām kṛṇouṁ val | anyo 'nyam abhi navata vatsaṁ jātam ivāghnyā z 1 z anuvratāś pituṣ putro mātrā bhavatu samiyataḥ | jīvā patye madhumatām vīcām vadatu śāṁtivām z 2 z mā bhrātā bhrātaraṁ dvikṣān mā svasāram uta svāś | samyañcas savratā bhūtvā vīcām vadata bhadrāyā z 3 z yena devā na viyanti no ca vidvīṣate mithiḥ | tat kṛṇo vrakṣa vo gr̄be samījñānam parusebhyah z 4 z jyāya-svantaś cittino mā vi yūnsta saṁrādhayantas sadhūrīś carantah | anyo 'nyasmāḥ valgu vadantu yāta samagrāś sta sahṛīcīnāḥ z 5 z samānī prapā saha vo 'nnabhāgas samānī yokt̄re saha vo yunajī | samyañco 'gnim saparyatārā nābhīm ivābhṛtāḥ z 6 z yena devā haviṣa yajatrā apa pāpmānam apunata | kroḍhān manyum ṛtīm bhaṅgāḥ duruktām aśocanām rejmarā ni dadhīṣā z 7 z sahṛīcīnāḥ vas saṁmanāṣaś kṛṇomy ekaśnuṣṭīn saṁvāna-nena sahṛdāḥ | devā ived amṛtaṁ rakṣamānīś sāyaṁ-prōtaś susamitir vo 'stu z 8 z 4 z

The ms. corrects dhukṣa in 3a to kṣudhā.

The variants from S are slight. In 5d three syllables are needed; samantāḥ, or samānāḥ, would fit in nicely and might easily have dropped before samānī. In 6d S has ivābhītāḥ. St. 7 is new; in pāda c ṛtambhāgāḥ, as given in the ms., seems out of harmony with the context.

20

[f.82b4] *paro paraś ca parastān ma parasta[5]raṁ agnir vātasyā dhrājyūpārdhādhe ahaṁ tāṁ* |

The first pāda seems to be defective; it seems to end 'paraś ca; for b I incline to read paraś tardāḥ paraś caran. For c read agnir vātasya dhrājyāpa bādhe ahaṁ tāṁ; cf. S. 3. 1. 5b.

udakasyedam enāṁ vānta[6]syedam nibhañjanām | agnen namasyāyām panthā neha tandāyanam tāvā z z [7]

In a read ayanāḥ, for b vāntasyedaiḥ nibhañjanām. In c a possible reading is agnir namasyāḥ; in d read tardāyanam tāvā.

pari tvā kṛṇavartmānī agnir dhūmanārcīś | sa tvān tardāḥ paraś carā[8]nyata dhy ahvāni

In a read ²vartane, in b dhūminārcīśat; in c sa tvān tardā; the sign transliterated hva in the last word is not clear, and I suggest carānyato 'dhi hrñlihi as a possible but doubtful reading.

*yārd etān māsreśitāś ca ye | sarvāns tān vrāhma[9] nā vāyām
śalabhaṁ jambhavāmāsi |*

In the first two words we seem to have what represents pāda a, with some mention of barley; the next pāda might be māsara eśitāś ca ye; the rest is correct. I take śalabha to mean an insect of the grasshopper sort.

*śalabhasya śalabhyas tardasyo[10] tpatattriṇāḥ z agnir vāta-
sya nrājyāpi nipyāmy āśām |*

In a read śalabhyāś, for b tardasyotpattriṇāḥ; pāda c as in st. 1, and for d *āpi nabyāmy āśyam (= S. 7, 70. 4b, 5b).

*yadida [11] gavi bheṣajam viśvōd rpāt samābhṛtam | ākhor
ghuṇasya tardasya [12] teśā snāvnāpi nāhyataḥ*

In a read yadidai; in b riphat is the simplest correction but an ablative would seem better. In c read tardasya, and for d teśām snāvnāpi nāhyata.

*trṣṭō tvam asī gandhena oṣadhir guṇaja[13] mbhīnt | ākhor
ghuṇasya jātānī | tānī jambhaya tejasū*

The kh in ākhor is imperfect. In ab read gandhenānṣailhīr ghuṇa*; remove the colon after jātānī.

*tūlam [14] tardas trṇasyāttu mūlam ākhur dhiyeśitah | atho
vrkṣasya phalgu [15] yad a ghuṇā yantu sāyavam z 5 z ann
4 z*

Read: tūlam tardas trṇasyāttu mūlam ākhur dhiyeśitah | atho vrkṣasya phalgu yad a ghuṇā yantu sāyavam z 8 z 5 z ann 4 z

Although many details are very uncertain here, the sphere is clearly that of S. 6, 50.

21

(cf. S. 5. 22 passim)

[f.82b16] *dyūś ca dhāś pītā pythī ca mātā cāguś ca nyacaks
jātave[17] dāh | te takmānam adhārāñcam nyāñcam īśāñham
namasyam tvaradhi dūra[f.83a1] ni asmat.*

This seems to be clear except toward the end; the simplest correction would be namasyam tvarāti, but it is very possible that a verb form is concealed in īśāñham and that namasyam is an adjective.

*takmanā iyāni te kṣetrabhbhāgum apābhajan prthivyāh pūrve
ardhe ati[2]hāya tīm ati no hinasvid grāhiṣ kritvā gr̄heṣe iti
kīlī suśīrṣṇah [3]*

The only suggestions I can make are imāni for iyāni, and kṣetrabhbhāgum apābhajan; in the rest the word division is not certain.

*takmanā parvatā īme himavantas somapṛsthāh vātaṁ jūtaṁ
bhīṣajā no a[4]kraṇ nasyeto marajānā abhi |*

Read takman, vātajūtaṁ bhīṣajām no akraṇ, and marajān. This is probably intended to be metrical. Pāda d seems to be of similar intent to S. 5, 22, 7a.

*na tvā striyās kāmavante na pūmāñsaś katime [5] cana | neha
takma kāmyālora titaro mahān.*

Read pūmāñsaś and we have two readable pādās: next takma seems probable and perhaps kāmalō; for the last pāda 'ravati taro mahān might seem possible, but it does not give any very good meaning.

*mā no hiñśin mahato mā [6] hiñśir mahyas tvām kumārān
babhro mā hiñśin mā no hiñśis kumāriha [7]*

In a read hiñśir, in b perhaps mahiyas; in c hiñśir, and in d perhaps kumāriha. Cf. S. 11, 2, 29.

*yah sākum utpādayasi balāśām kāśam anvrjām bhīmas te
takman hē[8]tayas tābhīs sa pari vrñdhī nā |*

In b read balāśām and perhaps anvrjum, for which S. has udnyagam. In c bhīmas, in d nah; S. has tābhīs sma in d.

*anyakṣetrena ramate sahasrākṣo [9] martyah abhūti prā-
rthas takmatmā no mrdāyisyati*

Read: anyakṣetre na ramate sahasrākṣo 'martyah | abhūd u
prārthas takmā ttmāno no mrdāyisyati z 7 z

In d perhaps we may read tmanām no.

*takman na bhāhiyā[10]śvā na gāvo neha te ca gr̄hā | śakamna-
rasya muṣṭihā punar gaścha mahā[11]vṛṣṇi . z 1 z*

Read: takman na bhāhiyā nśvā na gāvo neha té ca gr̄hā | śakam
bharasya muṣṭihā punar gaecha mahāvṛṣṇi z 8 z 1 z

The reading suggested in a is barely probable: in pādas ed I have followed S. which however has etu in d.

22

[f.53a11] yo hemantaṁ śāpayatho balenārvāg *de* [12] vety uda
 ye paro divah bhavūrudrayos sumati vṛṇimake anyatrā [13] ssad
 aghahariṣyā vy etu | yo dyām ī tanoti yo utarikṣam stabhrāty
 ojaso [14] jāyamānah tasmāi rudrāya haviṣā vidhemānyatrā-
 smad aghohā [15] viṣā vy etu z yayo rodhān nāpapadyate kiṁ
 canāntar deveśūta mānu [16] sesu | tābhyaṁ rudrābhyaṁ haviṣā
 vidhemānyatrāssad aghahariṣyā vy e [17] tu | yāv āśāte paśūnām
 pārthivānām catuspadām uta vā yo dvi [18] pādah | tābhyaṁ
 rudrābhyaṁ haviṣā vidhemānyatrāssad aghohavi [1.83b1] sū vy
 etu z z om̄ anyatrāssad aghahariṣyā vy etu z yasya pratihitā [2]
 yā ssa vyañjantu yāranyās paśava uta grāmyāsah | tasmāi
 rudrāya ha [3] viṣā vidhemānyatrāssad aghahariṣyā vy etu | yassād
 oṣaṇayo ba [4] bhṛiyamānā yanilsmān rakṣāso na yujanti viśve |
 tasmāi rudrāya [5] haviṣā vidhemānyatrāsmad aghahariṣyā vy
 etu yah parvatān nyana dadhe [6] ti vīdvān yo bhūtāni kalpa-
 yasi prajāgan. | tasmāi rudrāya havi [7] sā vidhemānyatrāssad
 aghahariṣyā vy etu z yāv āśādno carato dvi [8] pādo yaś catuspadah
 yā ugrā kṣipradhanvānān tābhyaṁ rudrābhyaṁ ha [9] viṣā vidhe-
 mānyatrāsmad aghahariṣyā vy etu | punaś caksuś punaś prā- [10]
 nām punar āyur dhehi no jātavedah rudra jalāśabheṣaja
 vīdvā [11] ndravstenāt haviṣā vidhemānyatrāssad aghahariṣyā vy
 etu z 2 z

Read: yāu hemantaṁ śāpayatho balenārvāg diva ety uta yo
 paro divah | bhavūrudrayos sumati vṛṇimake anyatrāsmad
 aghahariṣyā vy etu z 1 z yo dyām ī tanoti yo 'ntarikṣam stabhrāty
 ojaso jāyamānah | tasmāi rudrāya haviṣā vidhemānyatrāsmad
 z 2 z yayo rodhān nāpapadyate kiṁ canāntar deveśūta mānu-
 sesu | tābhyaṁ rudrābhyaṁ z 3 z yāv āśāte paśūnām
 pārthivānām catuspadām uta vā ye dvipādah | tābhyaṁ
 rudrābhyaṁ z 4 z yasya pratihitā yās ssa vyañjanti
 yasyāranyās paśava uta grāmyāsah | tasmāi rudrāya z 5 z
 yāsmād rṣayāo bhṛiyamānā yanty asmān rakṣāso na
 yuechānti viśve | tasmāi rudrāya z 6 z yah parvatān
 vanā dadhiṣe vīdvān yo bhūtāni kalpayasi prajānan | tasmāi
 rudrāya z 7 z yāv āśānān carato dvipādo yā catuspado
 yā ugrāu kṣipradhanvānān | tābhyaṁ rudrābhyaṁ z 8 z
 z 8 z punaś caksuś punaś prānām punar āyur dhehi no jātavedah
 | rudra jalāśabheṣaja tābhyaṁ dvavstenāt haviṣā vidhemānyatrā-
 smad aghahariṣyā vy etu z 9 z 2 z

Opposite f.83a 1.13 in the right margin is *nyoja*, which seems to indicate *stabhrān yojasa* for the end of that line.

In §. 6. 93. 2d we find *anyatrāśmad aghaviśā nayantu*, where *aghaviśā* is acc. pl. fem., probably agreeing with an omitted *īśūs*. In 3a I take *rodhān* as abl. case, probably meaning 'arrow.' *Pāda* 4b appeared in this same form in Ppp. 3. 32. 2b. At the beginning of 5b *yasya* seems necessary; but cf. KS. 30. Sa, 9. In 6a *rṣṭayo* is a conjecture based largely on the context, as is *vanā* in 7a. *Pāda* 9a = Ppp. 3. 17. 3a. In §. 2. 27. 6a we find *rudra jalāśabheṣaja*; I feel sure that there is corruption in *vidvān dvastenā*, but I can make no suggestion.

23

(§. 4. 17)

[f.83b12] *śānan tvā bheṣajānām vijeṣāgrṇimāhe cakre sahasra-*
 vi[13] *ryam sahasrān oṣadhe tvām | satyajitām śapathayāvanī-*
yām sahasā[14] nām punaścarām sarvā samahavy oṣadhi rto mā-
pārayān iti | yā[15] sisāpa śapanena yā vāgha mūram oṣadhe
 | *yā vā rathasya prō[16] sārthya togham utva sah | praticīna-*
phalā ity ekā yaś ca bhrātu[17] rviśvapati yaś ca jānuś śapati
nah vrahmā yām manyutaś capāt sarvām[18] tam no adhaspa-
dam yām te cakrur āme pātre yām sūtre nilalohite | [f.84a1]
yāmna mānse kṛtyām yām cakras tvayām kṛtyākṛto jahi |
dussvapnyām du[2] rjīvataḥ rakṣa bhyom arāyya | durvācas
sarvām durbhrūtaḥ tam ito nāśayā[3] masi | kṣudhāmāraṁ tṛṇā-
māram aghotām anupaśyatām | apāmā[4] rga tvayā vayā-
sarvām tad api rṣjumāhe z 3 z

Read: *śānām tvā bheṣajānām vijeṣā ā grhṇimāhe | cakre*
sahasraviryām sahasyām oṣadhe tvām z 1 z satyajitām śapathayā-
vānām sahaṁānām punaścarām | sarvā samahavy oṣadhi rto
mā pārayān iti z 2 z yā śāśpa śapanena yā vāghām mūram
ādhiilie | yā vā rasasya prāśārebhe tokam attu sā z 3 z praticīna-
phalo hi tvām apāmārgo babbhūvitha | sarvām mac cīapathān
ādhi variyo yāvayās tvām z 4 z yae ca bhrātrvyaś śapati yae ca
jānuś śapati nah | vrahmā yām manyutaś capāt sarvām tad no
adhaspadam z 5 z yām te cakrur āme pātre yām sūtre nilalohite
 | āme mānse kṛtyām yām cakras tvayā kṛtyākṛto jahi z 6 z
dussvapnyām durjīvataḥ rakṣa 'bhvam arāyyah | durvācas
sarvām durbhrūtaḥ tam ito nāśayāmasi z 7 z kṣudhāmāraṁ

trṣṇāmāram agotām anapatyatām | apāmārga tvayā vayām
sarvām tad apa mrjmahe z 8 z 3 z

The reading of the ms. in 1d might be defended if the apāmārga is understood as the plant addressed; to emend as above does not make much improvement. In 3ed prāśāyārebhē might be a better reading. Our st. 4 appeared previously Ppp. 2. 26. 4; our st. 5 is a variant of 8. 2. 7. 2. At the end of 8b our ms. offers nothing decisively helpful; it does seem to offer a basis for the reading suggested.

24

(8. 4. 18)

[7.84a4] samā bhūmi[5]z sūryenāhnā rātrī samāvatī kṛṇomi
satyam utaye rasās santi [6] kṛtvāri | yo devās kṛtyo kṛtyā harād
aviduṣo gr̄ham | vatso dhārar i[7]va mātarām tvām pratyag
upapadyatām | āmā kṛtvā pāpmānam yas tvayānna [8] jighā-
nisati | aśmādasthasyām jagadhbārayām bahulāś phaṭi [9] kari-
kratuh sahasradhāmām visūkhān vyaagrīvān śāya tvām prati [10]
sma cakruṣe kṛtyām priyām priyāvāte hara | yām cakrā na
sa[11]śākha śāśre pādam aṅgulim | cakrā bhadrām aśmabhyaṁ
abhaṅga [12] bhagavadbhyah anayāhas osadhyā sarvā kṛtyāyād
aviduṣo [13] gr̄ham | yām kṣetṛe cakrū yām gobhīo yām vā te
puruṣebhyah | apāmā[14]rgo pa mā iṣṭu pa kṣetṛiyām śapathā
ca mat. | apākyātudhānyo [15] n upa sarvā arāyya apāmārga
pra jayā tvām yyā ati srjasva [16] nah z 4 z

Read: samā bhūmis sūryenāhnā rātrī samāvatī | kṛṇomi
satyam utaye 'rasās santi kṛtvārih z 1 z yo devās kṛtyām kṛtvā
harād aviduṣo gr̄ham | vatso dhārur iva mātarām tam pratyag
upa padyatām z 2 z āmā kṛtvā pāpmānam yas tayānyām jighā-
nisati | aśmānas tasyām jagadhbārayām bahulāś phaṭ karikratu
z 3 z sahasradhāman visūkhān vigrīvān śāyaya tvām | prati sma
cakruṣe kṛtyām priyām priyāvate hara z 4 z yām cakrā na
śāśākha śāśre pādam aṅgulim | cakrā bhadrām aśmabhyaṁ
abhaṅga bhagavadbhyah z 5 z anayāham osadhyā sarvā kṛtyā
nādorūṣam | yām kṣetṛe cakrū yām gobhīo yām vā te puruṣe-
bhyah z 6 z apāmārgo 'pa mārṣṭu kṣetṛiyām śapathās ca yāh |
apāha yātudhānir apa sarvā arāyyah z 7 z apāmṛjya yātudhānān
apa sarvā arāyyah | apāmārga pra jayā tvām arāyyo ati srjasva
nah z 8 z 4 z

In the right margin opposite l. 9 stands *sadvah*, and opposite l. 10 is *ranū*.

In 3b the reading is hardly as good as that of S, which has *tenū*²; in 3c it seems highly probable that we have a corruption of the reading of S, *dagdhāyām*. Our st. 5 is almost identical with S. 5. 31. 11. I am confident that *adodusam* is the Ppp. reading in 6b, and that somehow a copyist's reminiscence of 2b has interfered. In 7b I have restored the reading of S, but *śapathāuś ca* mat would be possible. I have ventured to restore the first hemistich of st. 8 from S for the identity of 7d and 8b would easily cause its omission.

25

(S. 4. 19)

[f.84a16] *uta evāsy abandhukrd utāyesya ura jū* [17] *mila* |
uto kṛtyākṛtaś prajāmā abhras ivā śhinda vārsikam vro- [18]
hmanena pariyukto si kanvena nārṣadena | senevāsi tviṣi- [19]
mati na tatra bhayam astu yatra prāpnohy osadhe | agrehy
osadhinām [f.84b1] *jyotiṣevāpīdhīpayaḥ* | *uta pākasya trātāsy*
uta hantāsu rakṣasah [2] *yad adho devāvāsuraḥ tvayāgre nir*
akravataḥ taśmād adhi tvam osadhe [3] *apāmārgo ajāyata z om*
apāmārgo ajāyata | *vibindati* [4] *śatāśakha vibinda nāma te pitō*
pratyag vibhītām tvam yo asmān a [5] *bdhīdāsat* | *osada bhūmyā*
samabhavat ta dyām eti vr̄hatvacaḥ u [6] *di tvācō vydhūmayaḥ*
pratyak kartāram r̄chatu | *pratyam hiṁ saṁbabhūyatha* [7]
pratiśīnaphales tvam pratīs kṛtyākṛtyā amūm kṛtyākṛtām jahi
| [8] *śatēna mā pari pāhi sahārenābhi rakṣa mām īndras te*
vī [9] *rudhām pate bhadrojmanam īdadhuḥ z 5 z anu z 5 z* [10]
z z

Read: *utāivāsy abandhukrd utāivāsi nu jāmitā* | *uto kṛtyākṛtaś prajām abhrām ivā śhindhī vārsikam z 1 z vrāhmanena prāyukto si kanvena nārṣadena | senevāsi tviṣimati na tatra bhayam astu yatra prāpnohy osadhe z 2 z agra ehy osadhinām jyotiṣevābhdīpayaḥ* | *uta pākasya trātāsy uta hantāsi rakṣasah z 3 z yad adho devāvāsuraḥ tvayāgre nirakravataḥ taśmād adhi tvam osadhe apāmārgo ajāyathāḥ z 4 z vibhīndati śatāśakha vibhīndan nāma te pitō* | *pratyag vibhītām tvam taṁ yo asmān abhīdāsat z 5 z osad bhūmyās samabhavat tad dyām eti vr̄hatvacaḥ* | *tad vāi tato vibhīpīyat pratyak kartāram r̄chatu*

z 6 z *pratyāñ hi saṁbabhūvitha* *pratiśīnaphalas* *tvam* | *pratiśīs*
kṛtyāñ *ākṛtyāmūñ* *kṛtyākṛtañ* *jahi* z 7 z *śatena* *mā* *pari* *pāhi*
sahasrenābhi *rakṣa* *mām* | *īndras* *te* *vīrudhām* *pate* *bhadra*
ojmānam *ā* *dadhat* z 8 z 5 z *ana* 5 z

In st. 1b *jāmitā* seems possible, though *jāmitā* might be better in some ways; S has *jāmikṛt*. On *prayukto* in 2a see Whitney's Translation. In 6c *vrhadvyacah* is surely the reading for Ppp.; and in 6c the most plausible course is to follow S (as I have done). In 7ed it is entirely possible that our ms. has merely a corruption of the S reading, *pata ugra*. With 7ed cf. S. 10. 1. 6ed and Ppp. 1. 47, 3 ed.

26

{f.84b10} *rā* *dyāvāprthivi* *śchintāñ* *mūlam* *atho* *śirah* *viśhi-*
{11} *tya* *sadyatas* *prṣṭhāñ* *tāñ* *kaṇvāthām* *adhaspadāñ* |

In a read *arātyā*, in b *chinttāñ*; in c *vichidya*, probably *madhyatas*, and perhaps *prṣṭis* rather than *prṣṭhā*; in d *kaṇvāthām*.

idām *śrnu* *jā*[12] *tavedo* *yad* *amuṣyād* *vaco* *mama* | *rātyāt*
servam *isyañ* *prṣṇid* *vr̥ha*[13] *tam* *aśvinām* |

In b read *amuṣnād*, in c *arātyās* and perhaps *isāñ* *yat*; in d *aśvinā*, and possibly *prṣṇīr*, although *prāśnād* would also seem possible.

yā *svapne* *yā* *carati* *dorbhūtvā* *janāñ* *ann* | *rā*[14] *tim* *indra*
tvāñ *jahi* *tvāñ* *agnīr* *iva* *sīdaha* |

In a read *en* *carati*, in b *dāurbhūtyā*, in c *arātim*, in d *tāñ* and *sīdaha*.

īreṣṭha *me* *rājā* *va*[15] *rūno* *hañ* *satyena* *gaechatu* | *rātyām*
hutvā *santokām* *ugro* *devo* [16] *bhi* *dāśañ* |

In b instead of *hañ* we might read 'yāñ'; in c read *arātim* *hutvā* *santokām*, in d 'bhi'.

jyeṣṭhā *ca* *yā* *śinīvālī* *sapta* *tiro* *ty* *āyā* [17] *rātim* *viśed*
bhūtāñ *ghnāntu* *dāśi* *ivāgāñ*

In b read 'bhy *āyan*, in c *arātim*, in d *dāśi* *ivāgamāñ*.

zomo *rā*[18] *joṣadhiñbhis* *sūryācandramasā* *ubhā* | *rātyām* *zarve*
gandha [f.86a1] *rvā* *ghāñtv* *apsarasañ* *ca* *yāñ* |

In a read *rājāns**, in c arātiṁ, in d ghnantv and yāh.

bhavo rājā bhavīśarvāś indro vōyur vṝhespatih traṣṭā me [2]
dhyakṣoṣ pūṣa te rātiṁ ghnantu suvrataḥ |

Read 'dhyakṣoṣ pūṣa in c, 'rātiṁ and suvrataḥ in d.

ye ca devā bhūmicārā ye cāmī dīvy ā[3]sate ye ntarikṣa syete
te rātiyāṁ ghnantu suvrataḥ |

In pāda c the only suggestion I have is *ye* 'ntarikṣa īsyante which does not seem satisfactory; in d read as in the preceding stanza.

yā cesitāsurāir devebhir ī[4]śitā ca yā | atho yā manyor jāyate
rātrīṁ harmi vr̄ahmanā x 1 z

Read: *yā cesitāsurāir devebhir īśitā ca yā | atho yā manyor*
jāyate 'rātiṁ harmi vr̄ahmanā x 9 x 1 z

27

[f.86a5] *tarī me aditsadām mahād yakṣān vṝhad vapuh*
niśvār devāir nirṛtīx tanāyū[6]jū marām mṝtyor ha jāyate |

Pāda b seems good as given, mahād yakṣān vṝhad vapuh; pāda a lacks one syllable, and otherwise it is wholly unclear to me: the first three words of c are good, but I can make nothing of the syllables tanāyūjā; the rest seems possible as it stands, but marā might be a better reading.

ahmum sr̄ṣṭisūt patho vadodohim vōi rājanta [7]m ojasā |
āguṇśchati gutsam atigmām andayaṇpiklidvīrmum ojasā |

In a possibly ammīn sr̄ṣṭeechāt is intended, but for the rest of the hemistich I see nothing. In c perhaps āyūñjati may be read, which would give a fair pāda: after that I see nothing.

yā[8]vati dyāvāprthivī varimnā yāvad vā saptā sindhavo
mahitvā tāvati ni[9]rytīr viśvavārā viśvasya yā jāyamānasya
vedā x 3 z

Read: *yāvati dyāvāprthivī varimnā yāvad vā saptā sindhavo*
mahitvā | tāvati nirṛtīr viśvavārā viśvasya yā jāyamānasya veda
x 3 z

With pādas ab cf. 3, 4, 6, 2ab (= Ppp. 5, 8, 1): for pād cf. st. 5.

*viśvasya jāyamānasya de[10]vi puṣṭy asya vāpuṣṭipati tra-
bhūyatha | nāmo stu te niryte mātmam asmān parā[11]bhajendā-
param hātayāsi |*

In b I would read puṣṭasya vā puṣṭipatir bahliūvitha: in c read 'stu'; mātmam ought to mean something like 'do not harm,' but I cannot solve it; for d a possible reading is parabhagena- param ghātayāsi.

*derim aham nīrtiḥ vārdhamānas pīterā putram vā[12]sate
vacobhūḥ | viśvasyājāyamānasya devī śrāś-śrāś pradīsoro
nudasthe*

For this stanza cf. TS. 4. 2. 5. 4; with nīrtiḥ pāda a may stand tho TS. has vārdhamānas; pāda b seems good but TS. has dasaye and KS. dāmaye. In c read viśvasya yā, and probably devī; but cf. st. 3. In d I would suggest prati sūro 'nu casṭe; TS. has sūrī vī.

*a[13]panvantam ayajamānam iścha tena sebhyām taskara-
syānu śikṣa svapantam iścha sā ta ityā namas tu te niryte
ahām kṛyomi |*

Read: apanvantam ayajamānam iechā stenasyetyām taskara- syānu śikṣa | svapantam iechā sā ta ityā namas tu te niryte ahām kṛyomi z 6 z

This stanza also appears TS. 4. 2. 5. 4; there and in other places asunvantam stands in a, and if apanvantam (from pan) is not good, we must restore that here.

*amunvakā nīrytis saṁjagatsun nāsyā[15]s pītā vīdyate nāta
mātā | madhyāt sā srāmanu jīghāsi sa[16]rūmā na devānām
sūryam samāpa |*

In a read asunvakā and saṁjighatsur; perhaps for c we might read madhyāt sā srāmam no jīghānsus sarvāḥ: pāda d lacks one or more syllables, and I think it probable that sūrim should stand for sūryam; possibly samāpa can stand, but I cannot fit this pāda into the rest successfully.

*yad asya pāre tamāśaśukram jyo[17]tīr ajaīyata | sa nās
parṣad ati dviṣo gne vāiśvānara dyumat z 2 z*

Read: yad asya pāre tamāśaśukram jyotir ajaīyata | sa nās parṣad ati dviṣo gne vāiśvānara dyumat x 8 x 2 z

This appears TS. 4. 2. 5. 2, and we may also compare S. 6. 34. 5.

28

(cf. Vāit. 10. 17)

[f.86a18] pramucyamāno bhuvanasya gopa paśun no tra prati
 bhāgām etu | agnir yajñām trīvṛtām [f.86b1] saptatantum
 devām devebhīyo havayām vahatu prajānān z yū te dāñṣṭrā
 sudhayāu ropayiṣnū [2] jihvayete dākṣīṇā sam ca paśyata | anū-
 strām naś pitaraś tat kṛnotu yūpe [3] baddham pra vi mucyamā
 yad annam akliṣṭas tam avi juṣṭas parehīr īndrasya goṣṭha[4] m
 api dhāra vīḍvān. | dāhīrām tvā kavayas saṁśrāṇādū isam
 ūrjaṁ yajamā[5] nāya matsataḥ r̄ṣibhiṣ tvā saptabhir atriṇāhām
 pratigr̄hāmī bhuvane syone | [6] jamadagniś kaśyapas svād
 etad bharadvājō mudhū annam kṛnotu z pratigr̄ahitre go[7] tamo
 vasiṣṭha viśvāmitro dādārse śārma yaicchāt. | yan no agrum
 havitha jagāmā[8] nāvasya pātrām uta sarpiso vā | yad vā
 dhanam vahator ījagāmāgnis ṣad dhotā su[9]hatām kṛnotu |
 yad ūjyām prati jagrāha yāñ ca vṛihān ajaṁ candrena saha
 ya[10]j jaghāma | vṛhaspatir haviṣo no vīdhārī mā no hiṁseit
 saha go aśvā viṣā [11] ca | agniś nāyātū pratigr̄hātū vīḍvān
 vṛhaspatibh prāty etu prajānān. īndro [12] marutvān suhataṁ
 kṛnotu arāikṣauānām anemīro etu | yan no dudur varām akliṣṭīm
 [13] vasu yad vā dalpam upanenena nās saha | yad dhāvyetam
 saha vṛṣṭānātā agni[14]; ṣad dhotā suhataṁ kṛnotu | yan naś
 śālām viśvabhogām imām dādār gṛhaṁ vā yo[15]kramām saha
 kṛtyota yad vāharam upanāyona devā | agniś ṣad dho suhataṁ
 kṛnotu z [16] z 3 z

Read: pramucyamāno bhuvanasya gopa paśur no 'tra prati
 bhāgām etu | agnir yajñānām trīvṛtām saptatantum devo devebhīyo
 havayām vahatu prajānān z 1 z yāu te dāñṣṭrā sudhāhāu ropayiṣnū
 jihvayete dākṣīṇā sam ca paśyataḥ | anūstrām naś pitaraś tat
 kṛnotu yūpe baddham pra vi mucyamā yad annam z 2 z akliṣṭas
 tvām abhi juṣṭas parehīndrasya goṣṭham api dhāra vīḍvān | dā-
 hīrās tvā kavayas saṁśrāṇātū ūrjaṁ yajamānāya matsataḥ
 z 3 z r̄ṣibhiṣ tvā saptabhir atriṇāhām pratigr̄hāmī bhuvane syone
 | jamadagniś kaśyapas svād etad bharadvājō mudhū annam
 kṛnotu | pratigr̄ahitre gotamo vasiṣṭha viśvāmitro dādārse
 śārma yaicchāt z 4 z yan no agrum havīṣa ījagāmānāya pātrām
 uta sarpiso vā | yad vā dhanam vahator ījagāmāgnis ṣad dhotā
 suhataṁ kṛnotu z 5 z yad ūjyām prati jagrāha yāñ ca vṛihān
 ījām candrena saha yaj jagāma | vṛhaspatir haviṣo no vīdhārī

mī no hiñśit ṭsaba go aśvo viśā ca z 6 z agnīr nayatū prati-
grīñātu viśvān vṝhaspatiḥ praty etū prajānān | indro marutvān
suhutānā krnotv avekṣyānnam anamīśo 'stu z 7 z yan no dadur
varām akṣitām vasu yad vā kalpam tūpanenena nas saha | yad
vāvayayatvān ṭsahavṝṣṭanotā agnis ṭad dhotā suhutānā krnotu z
8 z yan naś śālām viśvabhogām imām dadur gr̄ham vā yoktrām
saha kṛtyotā | yad vāharan upanāyena devā agniś ṭad dhotā
suhutānā krnotu z 9 z 3 z

The arrangement of st. 4 is open to doubt, and its first two pādas might perhaps better be taken with st. 3 except that Vāit. shows no trace of them; the rest of st. 4 has appeared Ppp. 2. 28. 4, a hymn which has part of S. 6. 71: in Ppp. 2. 28. 4a svādū should be read. In 6d a possible reading would be hiñśid mā gāur. In 8c avyayatvam is given to match its equivalent akṣitām; but 8a would seem better if we read varam akṣitām vasu.

29

[f.86b16] sūryavarca iti yat suśrāvāham yena prajā jyotira-
grīś cara[17]nti some varco yad gośu varco mayi devā rāṣṭra-
bhṛtas ṭad akram.z

In a read yac suśrāvāham, in d akram: pāda c lacks at least one syllable, and it would be helped by the insertion of yat before some.

yajñe varco [18] marutoś ead adṝhān vāyuh paśūn pryat sam
bhugenā gandharvānām apsarasām [f.85a1] yad asmāi

In a it is possible to read maruto yad adṝhān, in b I would read aprīcat for pryat: at the end of c it seems necessary to read yad varco; for pāda d mayi " " .

yajñe varco yajamāne ca varco yad abhiṣikte rājani yaś ca
varcah surā[2]yām varco dhi yat. |

In b read abhiṣikte rājani yaś; in c I can only suggest 'dhi yad as indicated in the transliteration; supply pāda d as in st. 1.

rathe varca ratḥavāhane ca varco isudhāu varcas kavaca eva
va[3]rcāḥ aśvesu varcas z

At the end of a read varca and after rathe read varca. The ms. probably intends pāda c to be completed so as to read aśvesu varca 'dhi yad, followed by mayi " " .

sabhāyām varcas samityām ca varco vadhvām varca uta varco varc[4]su | dakśināyām varco dhi yat.

Read: *sabhāyām varcas samityām ca varco vadhvām varca uta varco varesu | dakśināyām varco 'dhi yad mayi* * * * z 5 z

śinhe varcā uta varco vyāghre vrke varco madhvā[5]re ca varcah | śayane varcah patunām yad vabhūva mayi |

In a read *varea uta*; in b it would seem that *madhvāre* is a fourth animal, but I cannot do anything with it on that basis, and have thought it possible to read *vrke* and *madhvāmre*. In c *śayane* seems good, but *patunām* (or *pattanām*) I cannot solve; *patūnām* does not seem very good; read *babhūva* in c, and for d *mayi* * * *.

hiranyavarcasas uta ha[6]stivarcasam saṅgramām yad yat. jīghān varco śhukr kṛṣṇām kṣetrarṣayo nyānadhur ma[7]yi | deva rāṣṭrabhṛtas tad akṛan.

In a read **varecasam uta*; in b *saṅgrāmām* is clear and I think we should read *yad yad* rather than *yudhyat*, but for *jīghān* I have no suggestion although it is clearly from han. In c read *kṣetra rṣayo* 'nyānydlmīr, and for d *mayi* * * *.

mayi varco mayi śravo mayi dyumnaṁ mayi tri[8]śih adhāspadām prdanyavovo haṁ bhūyāsam uttamah z 4 z

Read: *mayi varco mayi śravo mayi dyumnaṁ mayi triśih adhūspadām prdanyavovo 'haṁ bhūyāsam uttamah z 8 z 4 z*

30

(S. 3. 24)

[f.85a8] *payasvatī[9]r oṣadayaś payasvān māmakāś vacah atīo payasvatām paya ā harāmī siha[10]rāmī sahasrasī ghaṇī veda yathā payaś cakrā dhānyām bahuś saṁbhṛtīvā nāpa [11] yo vedaś ta vānī yojāmahe sarvīṣyāścāno gṛhe | yathā dyāus ca prthivi ca ta[12]sthātu varunāya kām | evām sphāti ni tanosi mayāreṣu khaleṣu ca | yathā rū[13]paś cintādhāras sahasradhāro aksatāḥ evā me astu dhānyām sahasradhāram aksatām [14] saṭahasta saṁhāraḥ sahasrāvā saṁgirāḥ yathēya sphātīr īyāśi kṛtaśca kū[15]ryasya ca | imā yāś pañca pradīśo mānavāś pañca gr̄īṣyavāḥ survāś saṁbhūr ma[16]yobhūvo vrse śapām nadīr iye | iha sphātīḥ sam ā vrhān iha sphātīr oṣadīndām [17] devānām*

uta sañgamā ihaivāśvinorasto dvāparasyoruta z tisro mātrā
ga[18]ndharvānām catastro grhapatnyah tāsām yā sphātivartamā
tayā tvābhi sarṣāma[19]si | jyeṣṭhasya tvāṅgirasya hastābhīyām
ā rabhāmahe | yathāsad bahudhānyam a[1.85b1]yakṣmām bahu-
pūruṣam z 5 z anu 6 z

Read: payasvatir oṣadhyas payasvan māmakām vacah | atheno
payasvatām paya ā harāmi sahaśraśah z 1 z aham veda yathā
payas eakāra dhāyūm bahu | saṁbhṛtvā nāma yo devas taṁ
vayām yajimālo sarvasyāyajvano grhe z 2 z yathā dyūn ca
prthivi ea tasthatnur varunāya kam | evāni sphātīm nī tanosi
mathanesu-khaleṣu ca z 3 z yathā rūpaś śatadhāras sahaśradhāro
akṣatuh | evā me astu dhānyām sahaśradhāram akṣatūm z 4 z
śatāhastā saṁśharah sahaśrāva saṁkīrah | yatheyām sphātīr
āyasi kṛtasya kāryasya ca z 5 z imā yāś pañca pradiśo mānaviṣ
pañca krṣṭayah | sarvāś śambhūr mayobhuvo vr̄ste śāpām nādīr
iveha sphātīm sām ā vahān z 6 z iha sphātīr oṣadhiṇūm devānām
uta sañgamā | ihaivāśvinorasto dvāparasyoruta† z 7 z tisro
mātrā gandharvānām catastro grhapatnyah | tāsām yā sphātiv-
artamā tayā tvābhi mr̄ṣāmāsi z 8 z jyeṣṭhasya tvāṅgirasya hastā-
bhīyām ā rabhāmahe | yathāsad bahudhānyam ayakṣmām bahu-
pūruṣam z 9 z 5 z anu 6 z

Our st. 3 has no parallel, st. 4 varies considerably from S. st. 7
has no parallel, and st. 9ab has none; st. 9cd = Kāuś. 20. 5cd.
For 7ed I can get nothing. In 5b we might perhaps keep sañgi-
rah; and in 6b possibly gr̄ṣṭayah, but I doubt if a variant from
S is intended in either case.

31

[1.85b1] abhyāśurat prathamā dhokṣamā[2] nāśirvān yajñān
būbhratī vāśrādevi | upa vatsām sr̄jod vācyate gāur visṛṣṭa[3]s
sumānā hīmkr̄ṇomi |

This stanza and the next two appear in Kāuś. 62. 21. In a
read atyāśarat and dhokṣamānā; in c probably sr̄jata as in
Kāuś. is intended, and vācyate is to be read; the ms. suggests
nānūr for gāur. In d we should probably read with Kāuś.
vyasṛṣṭa and “kr̄ṇoti.

badhān dhehi māvi dhehi bhuñjantī nadya gor upasi[4]da
dugdhi z irām asmā odanām piṇvamānāh kūlānāh gṛhītūm madhu-
mānūvā[5]bhāgānū |

Read: *badhāna vatsam abhi dhehi bhūñjati nijya godhug
upa sida dughī | irām asmā odanam pīvamānā kīlām ghrīam
madamann abhāgam z 2 z*

This is the reading of Kāuś. and I think our ms. offers no real variant: the margin suggests *idām* for *irām*.

*śā dhāvatu yamarājñasyavatsā sukṛtām pathā prathameha
dattā | ato[6] vrṣṭidattā prathamenas ḍgañ vatsena gām sañ srja
viśvarūpā |*

In a read *yamarājñas* savatsā. In c atho 'vrṣṭidattā' seems possible; Kāuś. has *atūrnadattā*; read *prathamedam*, and in d read *viśvarūpām*.

*prathamedā[7]m ḍgañ pūrvamād atra etābhy asmiññ loke
mabhya u tvā dadāti semaiñ dhenoh prā[8]thamām pārayāsi
īraddhayā dattā parame vyoman. |*

In a *pūrvamād* seems probable, followed perhaps by *etābhy* *asmīññ* *loke*. In b *dhenoh* is probable.

*jāñihāsmi sañsthiya [9] dhenavo gopatiññ yas tvā dadātu
prathama svadhāvān pūrvā hi tatra sukṛtās pars[10]hy atīsātā
rājasas parastāt. |*

For the beginning of *pāda* a *yājñiyo* 'smi is the only suggestion I have; *sañsthiya* follows (the ms. correcting *ya* to *tya*) and probably *dheno*. In b read *dadāti* *prathamas* *svadhāvān*. In d *atyēṣayitā* may be possible; read also in d *rājasas*.

*ati dhenur anadvāham anyānād yayoñ kramām [11] ati vatsā-
nām pitara ryabhām prati sāsurat.*

Pāda a seems correct; it looks as if *aty* might stand at the beginning of *h* and possibly *kramit* at the end, or *krame*. In c I think *pitaram* would be better; in d read *sāsurat*.

*jyotiṣmālī prathamā yā[12]hi sūre sonas te dhenavo patayo
bhavantu | sapta tvā sūryānnātāpantir imām dhā[13]mo sūti
saras parācāih z*

In b we may probably read *ayonās* *te dheno*; in c *sūryā* *unv*; in d *idām* would seem better than *imām*.

*dhātre sūtraya mahyām dadhānobhāu lokāu bhūñja[14]tī vi
kramazeva | iṣam urjaññām dākṣinām sañvāsānā bhagasya dhārām
ava[15]se prāīmo*

I doubt if sūtraya can stand in a, and would suggest sotre. In d bhāgasya is probably the reading, with prathmāḥ at the end. A pāda similar to our c occurs VS. 12. 57c and elsewhere.

sahasrāṅgā śatāṁ jyotiśāṁ hy asyā yajñiyasya paprir amṛta svargā [16] *sā nātu dakṣinā viśvarūpā ahiśantī pratigr̥hṇīma enām z 1 z*

Read: *sahasrāṅgā śatāṁ jyotiśāṁ hy asyā yajñiyasya paprir amṛta svargā* | *sā na nātu dakṣinā viśvarūpāhiśantīm pratigr̥hṇīma enām z 9 z 1 z*

32

(S. 4. 16)

[f.85b17] *ye te pāśā varunā saptasapiatis tredhā tiṣṭhanti
ruṣatā ruṣantah chinadya* [15] *sarve anytāṁ vadantāṁ yas
satyavāñ yadi tuṁ srjāmī* |

In a read varuna, in c read with the Roth-Whitney ed. of Ś
sinantu; in d read "vādy ati tuṁ srjāmī. The margin corrects
to chinabhyā.

īha spaśas pa carantī [19] *me syāma sahasrākṣu ati paśyanti
bhūmīm* | *so spannatōm pra munāti kaś cana ssa* [f.87a1] *mucyate varunasya pāśāt.* |

This varies considerably from verse 4 of S. In a read pra
and 'sya (for syāma), in b bhūmīm: for pāda c we may read
yo 'sya nākāḥ pra mināti kaś cana, or something very like that,
for the meaning of S. 4a is probably here. In d read na sa " ".
The margin corrects to mudyate.

utayam asya pr̥thivī sumīciḥ dyāur vr̥hatī [2] *r̥ antarikṣām* | *uts
samudro varunasya kakaṣār utāsmīn alpa udake namaktāḥ* | [3]

Read utayam in a, in b vr̥haty urv̥ antarikṣām. In c I would
read samudrāu and kakaṣāv; but also without changing samudro
we might read kakaṣāv, getting thus a meaning which might
stand. In d read niṣaktāḥ.

*yas tiṣṭhati manasū yaś ca vācāti yo nilāyaś carati yah pralā-
yām dvāu ya* [4] *d arvatas samniṣadva rājā tad veda varunās
trīṣyā*

Read: *yas tiṣṭhati manasū yaś ca vācāti yo nilāyaś carati
yah pralāyām* | *dvāu yad arvatas samniṣadva rājā tad veda
varunās trīṣyā* | z 4 z

*sarva Ind rājā varuno vi [5] caṣṭe yad antarā rodasi yas para-
stāt. | sunādītā ca nimiṣo jāmīnām aksān [6] na svāghnī bhū-
vānā mamīte |*

In a read *sarvān*, in b *yat* *parastāt*; in c *samīkhyātā* *asya*, in d *aksān* *na* *svāghnī*.

*trum eva rājan varuna dhātā devānam aśi viśvarū[7] pah
duśkarīmās tad asa᷍ piśāṅgo yas satyām vācam anṛtena hanti*

Pāda a seems good, but two more syllables would make it better; in b read *dhātā* *devānam*. In c the first word is probably some form of *duśkarīmā* and *piśāṅgo* is perhaps correct, but it may be that *śrīgo* is here; pāda d is correct. This stanza has no parallel.

*yas sāmānyo [8] varuno yo vyāsyo yaś cyaṁdecyo varuno yo
videcyah | yo dāivyo varuno yaś ca mā[9] nusas sarvān̄ teṣṭān̄
prati muñcāmy atra |*

Read: *yas sāmānyo varuno yo vyāmīyo yas samīdeśyo varuno
yo videśyah | yo dāivyo varuno yaś ca māmūṣas sarvān̄ trayi
tān̄ prati muñcāmy atra z 7 z*

S. has our pādas. abe as its vs. 8; our d represents its vs. 9.

*śatena pāśāir varunābhi dhei mā [10] te mody anṛtavā
nṛcakṣah | aśthām jālma udaram̄ śāśvityā kośevāvadhri; pa-[11]
rikṛtyamānād |*

In b read *moe* *anṛtavān̄*; for cd read *ūstām* *jālma* *udaram̄* *śāśvayitvā* *kośa* *ivābandhra* *parikṛtyamānāh*. I think *ivāvadhri* is not probable, if indeed possible.

*uto cit prapātayacilo tad apī nahyasi | uto tad asya gam̄ krtr̄ā
[12] rājā varunāyate*

It would seem possible to read here *uto* *cit* *prapātayād* *uto* *+* *+*; in c if we may read *asyāgam̄* it would seem fairly good; in d read *varunā* *iyate*.

*ānām chinadysa varuno nātām kaśipune yathā | mūlē tasya
vr[13]ścati ya enām pra mīniṣati z 2 z*

Read: *enām chinatti varuno nātām kaśipune yathā | mūlām
tasya viścati ya enām pra mīniṣati z 10 z 2 z*

For pāda b cf. S. 6. 138. 5.

33

(S. 6, 133-135)

[f.87a13] *ya imām devo mekhalaṁ ā[14]babandha yas
sumnāha yamāha yojaḥ yasya devasya pradiśā carāmī sa [15]
phāram rāchāt sāu mā vī muñcā*

For b read *yas saññanāha* ya u. mā *yuyoja*: in c read *pradiśā*:
for d read *sa pāram rechāt sa u mā vī muñcāt*.

*āhuta r̥yinām ary āyudhaṁ pūrvā vṛdhusya prā[16]śnati
aviraghñi bhava mekhale]*

Doubtless pāda a is to be restored from S, āhutāsy-abhihuta:
in c read *prāśnati*, and in d *viraghñi*.

*mṛtyor ahaṁ vrahmacāryād asmi bhūtām nirpājum [17] puru-
ṣām yamāya | tam āyaia vrahmanā tamazā śramenānāinām
mekhalayā sī[18]nāmi z*

Read: *mṛtyor ahaṁ vrahmacārī yad asmi bhūtām nirpācan*
*purnsah yamāya | tam āyan vrahmanā tapasā śramenānayāinām
mekhalayā sīnāmi z*

*ayam vajros tulpayatām vratena | āvāsyā rāṣṭram ava hantu
jīvām ki[19]nāntu skandhā prāśnātūṣṇihā*

In a read *tulpayatām*; Whitney suggests *mṛtena* for *vratena*.
The colon is to be removed and then we read *vratenāvāsyā*. For
c read *śrānātū skandhā pra-śrānātūṣṇihā*; no trace of pāda d is
in the ms., but we will probably be safe in restoring it from S,
vr̥trasyeva śacīpatih.

*adharo bhram adharo bhreṇa gūḍhat pr̥thivyā mo-[f.87b1]
srpat. | vajrenāvahatu śrayām*

Read: *adharo 'bhram adharo 'bhreṇa gūḍhaḥ pr̥thivyā
motsrpat | vajrenāvahataś śayām z 5 z*

*yo janāti tam anu iśeḥa yo janāti tam i[2]j jahi | jinato vajra-
sāyakah śimācām anuācam anu pātaya*

Read *jināti* in a and b, *iecha* in a: in c *sāyaka simantam*, in
d *anuācam*.

*yad uṣnāmi ba[3]lam kurve vajram anu pātayati | skandhām
amūṣya śātayām vr̥trasyeva śacīpatih | [4]*

In a read *uṣnāmi*, in c *śātayan*, in d *vr̥trasyeva*.

*yat pibāmi saṁ pibāmi samudrāiva saṁpīva | prānān amuṣya
saṁpīvām saṁpi[5] vāmy ahaṁ pīvām |*

Read: *yat pibāmi saṁ pibāmi samudra iva saṁpīvā | prānān amuṣya
saṁpīvām saṁpīvām ahaṁ pīvām z z*

*yad girāmi saṁ girāmi samudra iva saṁgīra prānān a[6]mu-
ṣya saṁgīrau sam girāmy ahaṁ gīrau z*

In b read *saṁgīrah*, in c *saṁgīrau*, in d *gīrau*.

*śraddhāyō duhitā topaso dhi jātā svā[7]sarṣinām bhūtakrtām
babhūva | sā no mekhale patīm ā dhehi medhātho no dhe[8]hi
tapa indriyām ca |*

In a read ⁴*dhi*, in c *matīm* and *medham*, in d *atīo*.

*yām tvā pūrve bhūtakṛta ḥsayāḥ | pari medhīre mā tvām [9]
pari svāsva mā dirghāyutvāya mekhale z 3 z*

Read: *yām tvā pūrve bhūtakṛta ḥsayāḥ pari bedhīre | sā tvām
pari svāsva mā dirghāyutvāya mekhale z 11 z 3 z*

In Book 19, as here, our ms. presents us one hymn material which in S constitutes several hymns; in fact in Book 19 that seems to be the regular condition.

34

[f.87b9] *ayam te śvaśrū[10]r vadatu śvaśuras te aśantaram |
devāt te abhiśocanām vrakma vidveṣanām kr[11]tam |*

In pāda a iyanī seems necessary; read *aśantaram* in b. I have not been able to grasp the intent of this hymn, so that my suggestions are made almost blindly.

*ā krāndaya ululā kur vāca ā dhehy apriyām śiro lipsamy aha-
stā[12]bhjām keśān te abhiśocanām |*

In a read *kar*, taking *ululā* as acc. plural; cf. LS. 4. 2. 9. In b read *vāca*; in c *lipsamy* would seem good; in d perhaps *keśāt* rather than *keśān*, but neither one seems very good.

*ye keśayos pratidhita kurirām yūpaśāḥ a[13]tho ye te svā
sānti sarve te abhiśocanām |*

In a it might be possible to read *keśayos pratiditāḥ*; in b I think it likely that we must understand *ya* followed by a word beginning with *upa*. In c *svā sānti* may seem good, or *śvāsanti*

apī trisamīdhōñd durmā[14]d. idam kṛnomi te | atho yañ te
sāmīvās sārvāñ lat te abhilocanām |

For pāda a I can suggest nothing; in b I would suggest
durmāñditam. Pādas ed can stand, I believe.

a[15]rkamadbhis prapāñtā munīcakṣuś kṛnomi te | atho
śvābhyo rāyabhyoñ prati ssa [16] gaganām kuru |

Pāda a can stand, prapāñtā = prapata + atas; b is also good;
in c read 'rāyabhyoñ, in d amsa.

ut tiṣṭhāre pālīyasya sāricinām padam bhava | atho u[17]d
akāryām kuru ḍām sam arṣi muśkayoh ε

In a read tiṣṭhāre, in b maricinām: the rest seems possible.

upakṣedābhi cālāya vā[18]tar tūlam ivijaya | dadbhissindhu-
sya bāhvor dadhy asūravastuve |

In pāda a it is clear that we have abhi cālāya, but the rest is
not clear; I have thought of upakṣetā: at the end of b I would
read ivijayat. It may be that pāda c begins with adbhis, and
that sindhoś ca should stand for sindhusya. For the rest I see
nothing.

abhi [19] gāya sābaleyañ śrōneyām sādhuvāhanām kālām
syākiś cora krddhy ē[1.88a1]yatoñ prati cālāya |

In a we might read sāballyām, in b śrōneyām. In c krddhy is
all I can see; pāda d seems good.

hrasvapuśchāñ vātarohāñ manojavām | tam te rathāñ sambha-
ranti devā[2]s tenā carāmī patim iśchamānā ε 4 ε

Read: * * hrasvapuśchāñ vātarohāñ manojavām | tam te
rathāñ sambharanti devās tenā carāmī patim iśchamānā ε 9 ε 4 ε

35

(cf. S. 4. 39; TS. 7. 5. 23; KSA. 5. 20)

[f.88a2] agnaya sam anamāñ tasmāñ prthi[3]vyās sam anamāñ
yathāgnaye prthivyās sam anamāñ evā mahyāñ sāmīnamas sam
namantu ε [4] vittim bhūtim puṣṭim paśum vrāhma vrāhma-
varcasah sāmīnates tu sāmīnematas svāhā ε [5] vāyave sam ana-
māñ tasmāñtarikṣena sām anamāñ yathā vāyave tarikṣena sam
a[6]namāñ | sūryāya sum anamāñ tasmāñ dīvas sam anamāñ yathā
sūryāya dīvā sam ana[7]mañ | candrāya sum anamāñ tasmāñ

nakṣattrāis sam anaman yathā candrāya nakṣattrāis sam a-[8] namān | somāya sam anaman tasmā osadhibhis sam anaman yathā somāyāuṣadhibhi[9]bhis sam anaman | yajñaya sam anaman tasmā daksinābhis sam anaman yathā yajñā[10]ya daksinābhis sam anaman samudrāya sam anaman tasmā nadibhis sam anaman [11] yathā samudrāyaya nadibhis sam anaman | īdrāya sam anaman tasmā viryena [12] sam anaman yathendrāya viryena sam anaman | vrahmane sam anaman tasmā vrahmacā-[13]ribhis sam anaman yathā vrahmane vrahmacāribhis sam anaman | devebhya sam ana[14]mañ tebhya amṛtena sam anaman yathā devebhya amṛtena sam anaman | prajāpataye zū[15]m anaman tasmāi prajāpatibhis sam anaman yathā prajāpataye prajāpatibhis sam anaman [16] neyā mahyam saṁnamas sam namantu | vittū bhūtiṁ puṣṭiṁ paśūn vrahma vrahmanavarcasām | [17] saṁnotes tu saṁnenenematas svāhā | supta saṁnamo ṣṭamī dkīlī sūdhanī saṁkāmā[18]n adhvaniṣ krnu saṁjānam astu no dhanē z 5 anu? z

Read: agnaye sam anaman tasmāi prthivyā sam anaman yathāgnaye prthivyā sam anamann evā mahyam saṁnamas saṁ namantu | vittū bhūtiṁ puṣṭiṁ paśūn vrahma vrahmanavarcasām | saṁnotes tu saṁnenenematas svāhā z 1 z vāyave sam anaman tasmā antarikṣena sam anaman yathā vāyave 'ntarikṣena sam anamann evā * * * z 2 z sūryāya sam anaman tasmāi divā sam anaman yathā sūryāya divā sam anamann evā * * * z 3 z candrāya sam anaman tasmāi nakṣatrāis sam anaman yathā candrāya nakṣatrāis sam anamann evā * * * z 4 z somāya sam anaman tasmā osadhibhis sam anaman yathā somāyāuṣadhibhis sam anamann evā * * * z 5 z yajñāya sam anaman tasmāi daksinābhis sam anaman yathā yajñāya daksinābhis sam anaman evā * * * z 6 z samudrāya sam anaman tasmāi nadibhis sam anaman yathā samudrāya nadibhis sam anamann evā * * * z 7 z īdrāya sam anaman tasmāi viryena sam anaman yathendrāya viryena sam anaman evā * * * z 8 z vrahmane sam anaman tasmāi vrahmacāribhis sam anaman yathā vrahmane vrahmacāribhis sam anaman evā * * * z 9 z devebhya sam anaman tebhya amṛtena sam anaman yathā devebhya amṛtena sam anaman evā * * * z 10 z prajāpataye sam anaman tasmāi prajāpatibhis sam anaman yathā prajāpataye prajātibhis sam anaman evā mahyam saṁnamas saṁ namantu | vittū bhūtiṁ

puṣṭiṁ paśūn vrāhma vrāhūṇūvarecasāṁ | saññates tu ṣaññine-
nematas svāhā z 11 z sapta saññamo 'ṣṭami dhūtis sādhanī |
sukāmāṁ adhvanaś krṇu saññānam astu no dhane z 12 z 5 z
anu 7 z

Kāṇ. 20. 19 has vittin bhūtiṁ puṣṭiṁ prajāṁ paśūn arṇam-
annādyam iti; we may regard our corresponding phrase ending
"varecasāṁ as good, but that which follows thereafter is unclear.
Our 12e = VS. 26. 1a.

36

[f.88a18] ye vārunā u[19]ta nāirayas patindāṁ vīrudhāṁ ca
pāśīt. | ye bhāumā bhūmyā adhi sambabhū[f.88b1]vus te tvā na
hyāvāmāṁ śivatātir astu z

In pāda a we might read nāirayas, in b pathinām and pāśāh.
In c read bhāumā, in d hiṁsān and astu te. The repetition of
pāda d assures us fairly well of the form intended, but na with
the subjunctive is not good. The first two pādas would be helped
a little by inserting ye after uta and again before pathinām.

ye antarikṣe divi ye ca pāśān ye vīcī [2] tātir astu te |

Read: ye antarikṣe divi ye ca pāśān ye vīcī* * * | * *

* * te tvā na hiṁsān śivatātir astu te z 2 z

It is clear that the ms. has dropped an entire line; I have
restored part of pāda d. Perhaps vīcī* should be completed
as a verb form from vi + cīt.

ye te mānusām manasyāḥ śrapaṇīta yām vā hotrām pitryām ā
rabha[3]nle | saññāmyo varuṇo yā jagāma sa tvā na hiṁsān
śivatātir astu te |

In a read śrayante, in b hotrām pitryām: in c ya-ā, in d
hiṁsāc.

apra[4]prāgā hyari vā saññīṣe gñim ā rebhīse yadi vā sañ-
ddham vidvān avīdū[5]n anṛtaṁ yad ivakta tvā sa tvā na siṁsān
śivatātir astu te |

Compare with the almost identical passage seven lines below:
I think we may read for a apapragā yadi vā saññīṣe, in b read
'gñim: in c yad uvaktha, in d tā tvā na hiṁsān.

yāt prācīyām dvīṣatas pr[6]ṣṭām sa pēṣyām jīmapātre pa-
pāpātha | hiṁsā salvenānytām yad ivakta tvā na hiṁ[7]sān
śivatātir astu te z

It would seem that the first three words of pāda a are good, but for pr̄ṣṭām sa I can get nothing plausible; for b p̄ṣyām cāmapātre 'pa papāta may be possible. In ed we may read hīnas satyenāñytam yad uvaktha tā tvā . . .

yam grāvānam ārabhanta yenāñsūn abhiṣanvanti so[8]manū |

In a read ārabhante, in b abhiṣanvanti. It looks as if somam were the first word of a pāda c. These two pādas do not seem to me to be in place in this hymn.

*yad vā dhanām dhanakāmo niremīṣe kṣetraṇī gām aśvām
puruṣām vobhayādatra tvā [9] na hīnsān śivatātir astu te |*

In b read kṣetraṇī, in c be vobhayādat te tvā . . .

*ye bāñavantam sudhiyām jeghāna tasyāśma [10] sāñcīd adhi
loṣṭābhṛtasya tvā na hīnsān śivatātir astu z |*

In a read yo, in b perhaps tasyāśmā and loṣṭābhṛtās; for c I think we should read sa tvā na hīnsāc . . .

*apapragā [11] hr̄di vā vyāmīṣe gñim ā rebhīṣe yadi vā sami-
ddhām |*

It is possible that the ms. intends here a stanza almost identical with st. 4; on that assumption we could supply pādas ed as in st. 4. In a read yadi, in b 'gñim.

*jāmyā kastam ghr̄[12]tam ā rebhīṣe dhanur voddkatam ita
cakramiteū manyur so rājño varunasyā [13] mīmattha sa tvā
na hīnsān śivatātir astu te z 1 z*

Read: jāmyā hastam ghr̄tam ā rebhīṣe dhanur voddkatam itthā cakramiteū | manyur vā rājño varunasyā māmantha sa tvā na hīnsāc śivatātir astu te z 10 z 1 z

Pādas ed seem good, but the first two do not seem to me at all satisfactory; if yadi were read for jāmyā it would be a great improvement. But the entire hymn is so unclear that only the most evident corrections can carry conviction.

37

[f.88b13] *yā te prajāpi[14]hatā parābhūd yonir vā mugdā
nihatā piśācāi | astrānam vādhi pa ti[15]sthāmi ghorām sarvāt-
ta tē vrahmanā pūrayāmī*

Read in a prajāpihatā, in b piśācāih; in c read astrānam vādhy upatiṣṭhūsi. Pāda a = Ppp. 3, 39. 1a.

*yady asyāk prajā varunena śu[16]śpitō dunnāmāno vā ṛvi-
yam asyārhaṇti | dveṣṭi sahapatnyād vidhi ca[17]krāmasyā
yatvān rāṣṭrā apā hantv agnīḥ*

Perhaps *śuṣphitā* may be accepted as an equivalent of *gumphitā*; in b read *durnāmāno* and *asyā* *ṛiphanti*; in c read *sāpa-
tyād* *yadi* *cakrāmasyāi*; for the first two words of d *yatvā
naṣṭān* might be possible; read *agnīḥ*.

*yasyās striyāt yadi lakṣmir apu[18]tryā garbho vāsyā yātu-
dānāḥ parābhṛtār dusyavatrim vā yat svapati fidarśe i[19]ndrā-
gnī tat kṛnūtām bhadroyā punah*

In a read *asyās*, in b *yātudhānāḥ* *parābhṛtāḥ*; in c d *dusyav-
atyāḥ* and *dadārṣendrī*⁹.

*devāīnāśād yadi putrām na vindase manu[1.89a1]syāmān vā
tvā śavathe rārādha | pitṛbhir vā te adhi sūtāḥ pratiṣṭhita idām
tan nī[2]j tanvo janoyāsī putrām z*

In b read *śapatho*.

*vāśvānaro janmānā jātavedāś prajāpatiś śīcā [3] reto syām
bādhethā dveṣṭi nīṛṭīm pardācāḥ putriṇīm īmīm prasvām kṛnōtū*

Read *śīcātu* *reto* 'syām in b, and *bādheta* in c; this seems to
be the simplest way to reconcile the variation of persons in the
verbs. With c cf. S. 6. 97. 2e.

*īha [4] prajām agnir asī dadābhy ādityebhir vasubhis samvi-
dānāḥ viśve devā havam ā[5]yantu māi sami putro syām jāyatām
viryavān. |*

In a read *asyāi* *dadāty*, in c *me*, in d 'syām'.

*yena devy aditiś garbham ādate ye[6]na prajāś arjatu prajā-
patiś tenāham asyāi havīṣā juhomi ya[7]thā pumānsaiḥ janoyāsī
putrām*

In a read *ādhatte*, in b *arjati* *prajāpatiḥ*, in d *putram*.

*vanve te putrām pari devatābhyo [8] anu manyantām maru-
tāḥ prśnīmātarāḥ garbhas tvā daśamā[9]syāṣ pra viśat kumārām
jātāḥ pipṛtād upasthe z 1 z*

Read: *vanve te putrām pari devatābhyo* *anu manyantām* *maru-
tāḥ prśnīmātarāḥ* | *garbhas* *tvā* *daśamāsyāṣ* *pra viśat* *kumārām*
jātāḥ pipṛtād upasthe z 8 z 2 z

38

(RV. 10. 136)

[1.89a9] keśy agnīm keśī [10] viṣṇūm keśī bibharti rodasi | keśī viśvām svar drṣe keśidam jyotir ucyate | [11] munayo vātarāśanāś piśāṅga vasate malāḥ vātasyānū dhrājīn yantu yad de[12]vāśo ayukṣata | unmādītā māneycena vācōn ā śastimā vayam | śarīre[13]d usmākām yūyam māntāso vī paśyata antarikṣena patatiś evan bhūtāvicākaśat. | [14] munīr devasya-devasyā śāukṛtyāya sakħā yata | om̄ asāukṛtyāya sakħā [15] yata | indraśyāśva vāyos sakħātō diviṣīto munīl ubhāu samudrāv ā hōi[16]tī sadyaś pūrvas utāparam gandharvāṇām apsarasām devānām carane caran | [17] munīś ketussya saṁvidvān sakħā svādūr madintamah vāyur asmā upāmantha[18]t pīnaṣṭi smā kūnānāmā mūnī viṣṇasya pātrena yad rudrenāt pībat saha | [1.89b1] saṁyukte dyāvāprthivi tiṣṭhante vīcītye keśendīkasya devasya viṣṭabhnāś chācīpa[2]tīk z 3 z

Read: keśy agnīm keśī viṣṇūm keśī bibharti rodasi | keśī viśvām svar drṣe keśidam jyotir ucyate z 1 z munayo vātarāśanāś piśāṅga vasate malāḥ | vātasyānū dhrājīn yantu yad devāśo ayukṣata z 2 z unmādītā māneycena vātān ā tastimā vayam | śarīred usmākām yūyam māntāso 'bhi paśyata z 3 z antarikṣena patatiś evan bhūtāvicākaśat | munīr devasya-devasyā śāukṛtyāya sakħā yatah z 4 z indraśyāśva vāyos sakħātō devesīto munīl ubhāu samudrāv ā kṣetī sadyaś pūrvam utāparam z 5 z gandharvāṇām apsarasām devānām carane caran | munīś ketasya saṁvidvān sakħā svādūr madintamah z 6 z vāyur asmā upāmantha pīnaṣṭi smā kūnānāmā | mūnī viṣṇasya pātrena yad rudrenāt pībat saha z 7 z saṁyukte dyāvāprthivi tiṣṭhante vīcītye | keśendīkasya devasya viṣṭabhnāś chācīpatih z 8 z 3 z

Our st. 8 has no parallel: if it is really a part of the hymn I would suggest for pāda b something like saṁ tiṣṭhante vīcītye, and would insert svar at the beginning of pāda d.

39

(RV. 10. 126)

[1.89b2] na tam anāno na duritām devāśo aṣṭa martyām sajōṣāśo yam aryamō mi[3]tīro nayanti varuṇo ati dvīṣāḥ tad dhi nayām vṛṣimāhe varuṇo mūtrā aryaman. [4] yan na nirhāso yūyām pāthā nethāthā marthām ati dvīṣāḥ | tam notanū yūyāt itaye va[5]runa nayiṣṭā no nāñjani sīhaś parṣījhaś parṣīno ati

Read: na tam aňho na duritām devāso aňta martyam | sajō-
 ŝaso yani aryamā mitro nayanti varuňo ati dvišah z 1 z taň dhi
 vayati vrnimahē varuňa mitrāryaman | yena nîr aňhaso yūyaň
 pâtha neňhâtha martyam ati dvišah z 2 z ttaň no tanu yūyaň
 fitaye varuňa mitrāryaman | nayišhâ no nesani stha parsištâh
 paršino ati dvišah z 3 z ſumam asmabhyaṁ ſtaye varuňo mitro
 aryamā | ſarma yaechantu ſapratha ādityāso yad imahē ati
 dvišah z 4 z ādityāso 'ti ſrîdho varuňo mitro aryamā | rudraṁ
 marudbhîr ugram huvemendram ādityam svastaye 'ti dvišah z
 5 z netâra ū ſu naſ tiro varuňo mitro aryamā | ati višvâni duritâ
 râjânaś carsaumâm ati dvišah z 6 z yūyaň višvâni pari pâtha
 varuňa mitrāryaman | yušmâkamî carmâli priyâli syâma ſupra-
 nltayo 'ti dvišah z 7 z yathâ ha tyad vasavo gâuryam eit padî
 ſitum amnîcatâ yajatrâh | evo ſv ašman muňcatâ vy aňhas pra-
 târy agne prataram na ţayuh z 8 z 4 z

In st. 3a RV. has *te nūnām* no 'yam, and I incline to think that the reading of our ms. is only a corruption of this; if we adopt the reading of RV. here, nominatives should stand in pāda b. It may however be possible that we have a form of *tan* in the pāda, so that we might read something like *tan* no *tanuñtha yūyam* *śitaye*; but this does not harmonize in meter. The form of 3ed is not wholly good; RV. has *parṣani* in d which might be read here; in fact *parṣino* may not seem acceptable. In 5b I think we are safe in reading with RV. as indicated.

44

[f.89b13] devasya svā savitū prasavāśiśinoh bāhubhyām
pāyām hastubhyām [14] prasūlo vrāhmaṇebhyo nīrvāpāmī | sā
me mā kṛiṣṭa sadam iṣyamānāḥ pitṛnāmī [15] loke anumadhān
prthivyeṣṭam pacḍmy anu dyāur manvalām ane antarikṣam
anumanyatā [16] m aditir devapultrā pīvet svarge loke stu | vrāk-

manośām adhi dadhōmy agnān bhūmyām [17] tvā bhūmim adhīdhārayāmi | agniṣ pacān rākṣatv odaṇam īmaṇi rakṣas pībīcā [18] nūdatām jātavedāḥ acyutam akṣitīm viśvadānīm utsam iva madam akṣīya [19] māṇam pīlā pīlāmaha uta yaś tṛtīyah prayataṇ bhāgām upajīvāntv atra | [f.90a1] prapīnam akṣitīm viśvadānīyo somam iva punar āpyayamānam putrāḥ pāutra uta yaś pro [2] pāutras teṣām astu nīhato bhāgā esaḥ māmējāryām nīhato bhāgā esa māṇu [3] ṣām mārsata glupto stu | vāivasvate ni dadhe śeṣadhim etām to smāl srjātū mahyam eva [4] punaḥ pūryatām ya dadan tasyāudano yam tiṣṭhaly akṣitīs sadā | vāivasvate glupto [5] stu rājñā samīlopajīvāntu me svā z śatadhāram sahasradhāram utsam akṣa [6] tām yaś ca māṇāḥ salīlasya madhye | ūrjām duhānam anapashphurantam upāśi [7] ya sukṛtām yatra lokāḥ z z om upāśīya sukṛtām yatra lo [8] kāḥ z anu 5 z z ity atharvāṇī pāippalādaśākliṇyām pañcamā [9] z kāndah z z

Read: duvāya tvā savitūḥ prasave aśvinor bāhubhyāḥ pūṣṇo hastābhyāḥ prasūto vrahmaneṣhyo nirvāpīm | sa me mā kṛṣṭa madam īṣyamāṇāḥ z 1 z pītrīṇām leke anu madam pīthīvyeṇām pacāmī amu dyāur manyatām any antarikṣam | anu manyatām aditīr devaputrā pībet svarge loke 'stu z 2 z vrahmanośām adhīdāhūmy agnān bhūmyām tvā bhūmim adhīdhārayāmi | agniṣ pacān rākṣatv odaṇam īmaṇi rakṣas pībīcān nūdatām jātavedāḥ z 3 z acyutam akṣitīm viśvadānīm utsam iva madam akṣīyamānam | pītā pīlāmaha uta yaś tṛtīyah prayataṇ bhāgām upajīvāntv atra z 4 z prapīnam akṣitīm viśvadānīm somam iva punar āpyayamānam | putrāḥ pāutra uta yaś prapīntras teṣām astu nīhato bhāgā esaḥ z 5 z māmējāryām nīhato bhāgā esa māṇuṣām tāmārsata kīpto 'stu | vāivasvate ni dadhe śeṣadhim me tām tasmāt srjātū mahyam eva punaḥ z 6 z pūryatām yo dadan tasyāudano yam tiṣṭhātī akṣitīs sadā | vāivasvateṇā kīpto 'stu rājñā samīlā upajīvāntu me svāḥ z 7 z śatadhāram sahasradhāram utsam aśvītām vyaecāmāṇāḥ salīlasya madhye | ūrjām duhānam anapashphurantam upāśīyāḥ sukṛtām yatra lokāḥ z 8 z 5 z anu 8 z

ity atharvāṇī pāippalādaśākliṇyām pañcamās kāndah z z

Of the numerous variations of the formula in st. 1 that in KS. 1. 4. is most like ours; for the end of st. 1 cf. S. 4. 34. 8e and Ppp. 6. 22. 8e. With our st. 8 cf. S. 18. 4. 36. For st. 6ab I can make no suggestion that seems promising.

TONES IN SUMERIAN

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In his interesting article 'The Pronouns and Verbs of Sumerian,' published in the *Proceedings of the American Philosophical Society*, vol. 54 (1915), Professor Prince stated (p. 44) that I had suggested that the different persons in the Sumerian verb might have been distinguished by a difference in quantity of the vowels of the preformatives, so that, for example, 'he made' might have been *in-gar*; 'thou madest,' *in-gar*; 'I made,' *in-gar*—*i* denoting a very short *i*, *i* a short *i*, and *ı* a long *i*; cf. the three Segöls in Hebrew *elōhîm* 'god,' *heqî* 'my lot,' and *simqêna* 'they [fem.] will find.'

The vowels in Aztec have four different pronunciations, and in Siamese the vowels have three quantities: very short, short, and long; cf. Misteli's new edition of Steinthal's *Charakteristik der hauptsächlichsten Typen des Sprachbaues* (Berlin, 1893), p. 113, n. 1; p. 207). Proto-Slavonic had very short, short, and long vowels, also a musical accent with different intonations (*EB*¹¹ 25, 233^b, 12; 236^b, 1. 4).¹ Sweet (*Primer of Phonetics*) distinguishes very short, short, half-long (or medium), long, and very long sounds. In English we have three varieties of *i* in *military* and *police*: the second *i* in *military* is very short, the first is short, and in *police* we have a long *i*. Consequently the possibility of a differentiation of the three persons by different quantities of the vowels in the preformatives (*in*, *is*, *in*) cannot be denied; but I never advanced this theory either in my publications, or in my academic lectures, or in discussions at philological meetings, or in private conversations, or even in my wildest dreams.

Nor did Bertin (*PSBA* 5, 19) suggest such a distinction. In the paper cited by Prince he speaks only of accent = stress in Sumerian; he thought that Sumerian originally had the accent on the antepenultimate or even on the pre-antepenultimate (contrast *SFG* 55).

Accent, of course, may denote not only stress, but also pitch, intonation, modulation of the voice, manner of pronunciation.

Gabelentz, *Die Sprachwissenschaft* (Leipzig, 1891), p. 361, says: 'Alles das, was man unter dem französischen Namen *accent* begreift, gehört hierher: Höhe und Beugung des Tones, Rhythmus, Art der Lauterzeugung.' A man born in this country may have a pure American accent, but may misaccentuate certain words, saying, for example, *legislative*, *exigencies*, *intercolary*, *transférable*, *décadent*, whereas an immigrant may correctly accentuate these words, but show his foreign accent by pronouncing the *g* in *legislative* like *ch*, the *t* like *d*, and the *v* like *f*.

I fail to see how Prince with his remarkable linguistic equipment can have misunderstood both Berlin and me. When he quoted the remark I made 40 years ago (*SFG* 19, n. 6; cf. 41, L 9) in *AJSL* 19, 205 (July 1903)* and in his *MSL* xxi (1908), he correctly interpreted the term 'accent,' which I used in 1879, to mean 'tone-accent.' I stated in *SFG* 19, n. 6, that the cuneiform characters *KIL* (*rim*, *rap*) = Assyr. *garârs* 'to run' and *GUR* = Assyr. *târu* 'to turn' were both read *gur* in Sumerian, but were no doubt pronounced with a different inflection of the voice,² perhaps *gur* = *garâru* 'to run' as *gûr*, and *gur* = *târu* 'to turn' as *gûr*. I added that the tablets to be copied were sometimes dictated; so it could easily happen that a scribe did not hear which accent *gur* should have in a particular case. He might therefore write *gûr* instead of *gûr*, and it would perhaps be better to term this 'confusion of accents' instead of 'phonetic spelling.' If I had thought that there was a quantitative difference between the two syllables, I should have used *gûr* and *gûr*, not *gûr* and *gûr*. So far as I know, the acute and grave accents have never been used to distinguish long and short vowels (though the acute accent is at times found used to mark long vowels),³ but they have been repeatedly employed for indicating different tone-accents, e. g. by Misteli, *op. cit.* xxiv; cf. also Lepsius's *Standard Alphabet*, p. 234 and below, n 3. Sweet, *Elementarbuch des gesprochenen Englisch* (Leipzig, 1886), p. 44, used the acute accent for the rising intonation and the grave for the falling. If I speak of two monosyllables having different accents it is evident that I mean musical accents, not stress-accents.

The term 'tone' instead of 'accent' = musical accent or tone-accent was not customary in 1879, at least not in Germany. Georg Curtius in his lectures on comparative philology, which

I attended twice (in 1876 and in 1878), used the term *Betonung* for 'intonation' or 'tone-accent,' but *Betonung* means, as a rule, 'stress'; a *betonte Silbe* is an accented syllable (cf. Gabelentz, *op. cit.* 357). The term *Betonung* is used also by Misteli (*op. cit.* 162). On p. 303 of Misteli's work we find beside *Betonung* the term *Intonation*, and on p. 304 *Töne*. Even in this country the term *tone* = musical accent is comparatively rare. The definition of *tone* as a distinctive quality or pitch forming in some languages a fixed feature of the pronunciation of words, as in Chinese, Swedish, etc., was not given in the original edition (1859-91) of the *Century Dictionary*, although Whitney was the editor-in-chief, but in the two supplementary volumes issued in 1909. In Webster's *New International Dictionary* the term *tone* is defined as an intonation, or inflection, of the voice which distinguishes the meaning of a word from that which it has when pronounced with a different inflection, as in Chinese and some other languages. In Pekingese *ma¹* means 'mother,' *ma²* 'hemp,' *ma³* 'horse,' *ma⁴* 'to revile.'

The title of the recent article by C. B. Bradley, analyzing the tones of Cantonese and Pekingese words (*JAOS* 35, 199), is 'Tone-accents of two Chinese Dialects,' and whenever he uses the term *tone* he puts it in quotation-marks. On p. 201 he says: "'Tone'" in our sense of the word is not exactly pitch at all, but rather a patterned change or movement within the field of pitch.' He is inclined to think that there are six tones in the Cantonese dialect, which may be reduced to three, each having perhaps a short variety. Gabelentz (*op. cit.* 362) says: 'Im Chinesischen haftet, je nach der Mundart, jedem Worte ein bestimmter Ton an, der gleichmässig gezogen, steigend oder fallend, kurz abgesprochen und dann wieder hoch oder tief sein kann.' In *EB*¹ 1, 113 (1911) the Chinese tones are treated under *accent*. Dr. Giles, of Cambridge, says there (p. 113): 'In languages like Chinese, which have neither compound words nor inflection, accent plays a very important part.' On page 112² he remarks: 'Swedish also has a well-marked musical accent.' Misteli (*op. cit.* 207) says that there are five tones, or accents, in Siamese.

The term *accent* was used in this sense also by F. Max Müller. He said in his *Lectures on the Science of Language* (New York, 1884), 1, 263: 'Chinese has about 450 radicals. These 450

sounds are raised to 1263 by various accents and intonations.⁷ According to Giles, whose article (*EB*¹¹ 6. 217^a) is quoted by Prince in *JAOS* 34. 326-327, there are 420 vocables in Pekingese and 800-900 in Cantonese; he remarks that Cantonese is supposed to approximate most nearly to the primitive language, whereas Pekingese (Mandarin) perhaps has receded farthest from it. In his introductory lectures to his second series of *Lectures* Max Müller stated with reference to Annamese (cf. *EB*¹¹ 2. 62^a): 'One of the early missionaries said, When I arrived in Cochin-China, and heard the natives speak, particularly the women, I thought I heard the twittering of birds, and I gave up all hope of ever learning it. All words are monosyllabic, and people distinguish their signification only by means of different accents in pronouncing them. The same syllable, for instance *da*, signifies twenty-three entirely different things, according to the difference of accent, so that people never speak without singing. This description, though somewhat exaggerated, is correct in the main, there being six or eight musical accents or modulations in this as in other monosyllabic tongues, by which the different meanings of one and the same monosyllabic root are kept distinct. These accents form an element of the language which we have lost, but which was most important during the primitive stages of human speech.'

It is, of course, a mistake to suppose that we have lost these modulations. *EB*¹¹ 6. 217^b, below, correctly states that the Chinese tones may be compared to the half-involuntary modulations which express emotional feelings in our words. We may compare, for example, the different intonations of the words *like that*. If an artist is trying to show one of his students how a certain line should be improved, the student may ask, after having tried to carry out his master's instructions, *Like that?* i.e. 'Should it be like that?' The master thereupon may draw the line himself, adding laconically, *Like that!* i.e. 'No, it should be this way!' After critically surveying his correction for a moment and perceiving enthusiastic appreciation on the part of his pupil, he may say, *Like that!* i.e. 'Do you like that?' The tone of the first and the third *like* are entirely different, and even the second has a different intonation.

In Germany it was customary for barbers to shave their customers at home. It was also customary to shorten the salutation

Guten Morgen! to *Morgen!* just as *Gesegnete Mahlzeit!* was shortened to *Mahlzeit!* (see R. Meringer, *Indogermanische Sprachwissenschaft*, Leipzig, 1899, p. 31; cf. also p. 17). A barber might meet one of his distinguished customers in the street and say respectfully, *Morgen!* i.e. 'Good morning!' The customer would reply, with a somewhat condescending intonation, *Morgen!* Thereupon the barber might ask, *Morgen?* i.e. 'Shall I call at your house tomorrow?' and the customer might reply, *Morgen!* i.e. 'Yes, you may come tomorrow.' The conversation would end by the barber bidding his distinguished customer again a deferential *Morgen!* i.e. 'Good morning!' the customer replying, somewhat nonchalantly, *Morgen!* In this brief conversation the word *Morgen* would have six different intonations; even the first and the last *Morgen* of both barber and customer would have different inflections of the voice.*

In the German edition (by Fick and Wischmann) of Max Müller's work (Leipzig, 1892-93) we find (1. 357) *Accente und Betonungen* for 'accents and intonations'; in 2. 29 *vermittelst verschiedener Betonungen in der Aussprache* is used for 'by means of different accents in pronouncing them,' and *sechs oder acht musikalische Accente oder Modulationen* for 'six or eight musical accents or modulations.' The term *musikalischer* (or *tonischer*) *Accent** is used also by Sievers in his *Phonetik** (Leipzig, 1901), § 600, 602, 661. Sievers introduced these terms in the second edition of his book (1881), § 30 (contrast p. 114 in the first edition of 1876). On p. 80 of his *Rhythmischo-melodische Studien* (Heidelberg, 1912) Sievers speaks of *Wort-tonhöhen* in Chinese, etc. The term *tone* is found in Jespersen's *Elementarbuch der Phonetik* (Leipzig, 1912), p. 182 (15. 8). Viëtor's *Kleine Phonetik** (Leipzig, 1913), § 131, distinguishes *Dauer*, *Stärke*, *Höhe*, i.e. quantity or length, stress or force, and intonation or pitch. For *accent* = 'stress' Jespersen employs *Druck* (14. 1) = *Nachdruck* (Sievers, *Phonetik*, § 570). The term *tones* was used as early as 1857 by Edkins in his *Grammar of Colloquial Chinese* (2d ed., Shanghai, 1864). He said: 'By natural tones are meant certain inflections of the voice and variations in time and pitch used with vowels and consonants'; see the quotations in Techmer's *Phonetik*, 1. 182. Techmer gave there also some remarks on tones in certain African languages (Hottentot, Mandingo), and on p. 180 he quoted

Storm's résumé on tones in Norwegian and Swedish (cf. also p. 70 and *ER*¹¹ 24, 297^a, 298^a). The term *tones* was used also in Lepsius's *Standard Alphabet* (London, 1863), p. 232, 234, 241, 243.

Nevertheless these quotations from phoneticians and linguists show that I was perfectly justified in using the term *accents* instead of *tones*, and Prince's misunderstanding of the plain statements made by Bertin and myself in English and German may create a certain prejudice against his explanations of intricate syntactical problems in Sumerian. I do not prefer the term *accent* to *tone*; I merely want to explain why I used *accent* instead of *tone* 40 years ago. I was convinced in 1878 that there were tone-accents in Sumerian as in Chinese, Annamese, Siamese, Littuanian, Serbian, Swedish, Norwegian, Hottentot, and Mandingo, but I never entertained the idea that in the cases where the Sumerian preformatives of the third person seem to be used for the first or second person there was a quantitative or tonal difference in the vowels. This phenomenon must be explained in a different way; in a number of such cases we have a different construction in Sumerian.

In the incantation *ASKT* 79 we find, for example, for the Assyrian *gibil ina išatika elliti ina bit ektili nûrû taššakan* 'O Firegod, with thy bright fire thou makest light in the house of darkness,' in Sumerian *gibil izâ-za da laugalga' e-giggiga laj ab-gaga*, which means literally 'O Firegod, thy fire bright and radiant the house of darkness-light makes,' so that *ab-gaga* is the third person, not the second (cf. *CV* 21).² We need not read *kuga* (*SGI* 126) instead of *giggiga*. The gloss *kuga* is a synonym of *giga*; cf. Arabic *rayâh* (*AJSL* 22, 203). The older form of *gik*,¹² *gi* was *mi*. The change of *mi* to *gi* was not due to nasalization (*SGI* 100, n. 1). *Gi=gyi=yi=mi*; see *OLZ* 17, 454 and my note on Armenian *g* for *y* in *ZDMG* 69, 564; cf. also the modern form *Guštâsp* for the Old Persian *Vâštâspa* (Jackson, *Persia Past and Present*, p. 64; *Zoroaster*, p. 5). It might be well to add here that the Biblical *Tatnai* is not a corruption of *Vâštâna* (*JBL* 32, 114; contrast *AJSL* 24, 244; *GB*¹³ 931^b). For *ektili* 'darkness' see *OLZ* 16, 492.

It is, of course, important that the Sumerian forms be correctly analyzed. For instance, we must not read in 4 R² 10, 37^b (*ZB* 65) *tu-bu ban-nip* instead of *tu git-ban-nip* (*SGI* 90; 86

§ 128 e) and regard *bu* as a possessive suffix modified by vocalic harmony. Nor must the root *ip* 'to be wroth' in *ib-ba-bi* 'his wrath' or 'he against whom someone is incensed' = *al-maqdābu* 'alājhi in the first sūrah of the Koran be explained as a pre-formative of the second person (*MSL* xxvii, § 26 = *AJSL* 19. 215, § 26). The correct explanation of *ib-ba-bi* 'who has provoked wrath' was given 37 years ago in *ASKT* 188, no. 101. For *git* = *qabātu* see *CV* 25.

In some cases Prince is very conservative: in *Proc. Am. Phil. Soc.* 54. 34, 1. 2 (cf. also *AJSL* 33. 44, *ad* 1. 20) he gives, for example, the old incorrect reading *muğ* for the preposition corresponding to the Assyrian *eli* 'over,' although he has on the preceding page the correct reading *ugu* in *ugu-su-nene* = Assyr. *elikunu* 'upon you.' I have explained the agglutination in the plural forms of the Sumerian possessive suffixes and in the corresponding Semitic forms in *Judges* (*SBOT*) 65. 46 (cf. *CV* 12). This *ugu* is connected with *gu* 'neck, shoulder,' which is used also for 'height' (*SGI* 102), just as Heb. *kaṭef* is used of the high table-land of Moab or of the Philistine foothills or of the hills east of the Sea of Galilee (*TOCR* 1. 303). Also *Shechem*, on the high road from north to south, means 'shoulder.' Sum. *ugu* is a formation like *ugur* 'sword' from *gur* 'to cut up' (*SGI* 43; cf. *UV* 35; contrast *SG* 155, *ad* § 58, 59).¹¹

The reading *ugn* should have been adopted before Brünnow (8888; cf. Meissner 6597) recorded it, since we knew that the Sumerian equivalent of Assyr. *na'butu* 'to flee,' *ugu-de*, could be written either with the sign *U* = *bēlu* 'lord' or with the sign *U* = *šam* 'herb' (cf. Brünnow 6035, 6721). That the first element of the Sumerian expression for 'to flee' should not be read *muğ*, but that the *U* = *bēlu* should be separated from the *KA* = *gu*, was pointed out in *SFG* 52. 2. The *de* in this phrase is not the verb *de* 'to speak' (originally 'to flow'; cf. our *flow* of eloquence, *fluency* of speech, and also *to dry up* = 'to cease talking'), but is a byform of *du* 'to go,' so that *ugu-de* corresponds to Assyr. *šešū* 'to get up and get away.' In Arabic, *rāfa'a* means 'to lift, raise' and 'to remove,' and *irtafa'a* 'to be raised or removed.' Arab. *fāla'a* signifies 'to rise, ascend' and also 'to go away' (Arab. *fāla'a* 'ānhum *idā gāba*). In modern Arabic *fāla'a* is used also for 'to go out, to leave' (cf.

Mic. 78, l. 2; ZA 30, 97). In the third Sumerian family law (cf. ZA 30, 93) we find *ma biti u igari etéla* 'he must leave hovel or mansion,' i.e. it makes no difference whether his father be poor or rich (contrast BA 4, 86). The word *igary* has here the same meaning as in l. 22 of the Flood Tablet, while *bitu* corresponds to *qiqqisū*. In Arabic, *bait* (from *bd* 'he entered'; cf. above, p. 254) means not only 'house,' but also 'tent' (cf. *baitu* 'l-ṣa'ri'). On the other hand, the Assyrian equivalent of Hebrew *əh* 'tent,' *əlu*, meant 'city' (AJSL 22, 199; cf. also BA 3, 579). I have shown (JAOS 32, 6) that Assyr. *qiqqisū* is a reduplicated form of Heb. *qas* 'straw,' just as French *chaume* means 'stalk, stuble' and 'hut' (= *chaumine, chaumière*). Luther used *Hütte* 'hut' for 'tent.' The original meaning of *hut* is 'wattle, hurdle.'

In a great many cases we find in Sumerian the third person instead of the first, e.g. *mae¹² eri-su ide-su mun-gam-am* = Assyr. *andku aradka mazarka kansaku* 'I, thy servant, before thee I bow' (4 R² 24, no. 3, l. 10). The Sumerian construction is here: 'I, thy servant, before thee bows,' not 'I bow.' The pronoun *I* may be construed with the third person, especially when it is followed by 'thy servant.' We are all familiar with *I* instead of *I am* (cf. on the other hand *ain't, don't* for *is not, does not*). Assyrian *kansaku* stands for *kansaku*; the stem *kamisru* is a transposition (cf. AJSL 32, 64) of Heb. *samāk* 'to prop, support'; the original meaning of Assyr. *kamāsu* 'to collapse' is 'to be unpropped.' For the etymology of *ardu* 'servant' see ZDMG 69, 172, n. 11.

In the same way we must explain the third person instead of the first in *u-turāni-ta*, 'from the days of his youth' = Assyr. *ulū 'an qiriku* 'from the time I was young': *u-turāni-ta* is co-ordinated to the enclitic *me* in *mulu ugu-mu zeho*, 'what is good for me,' in the preceding line. The construction, from our point of view, is: 'May she do what is good for me—me, O Lady, who from the days of his youth is fast bound to adversity, who ate no bread, weeping was my refreshment,' etc. (cf. CV xxxv; ZB 34). In connection with the phrase 'fast bound to adversity' I have called attention to the line of Mintalammis (BL 92): *inna 'l-mar'a rahnu mugibati* (cf. JBL 32, 141) = 'man is a pledge¹³ of adversity' (see BA 5, 215, n. **).

In the dialogue between Ea and his son Marduk, which we find in the fifth tablet of the *Surpu* series,¹⁴ the Assyrian version

has (ZR 26, 30): *mári miná lá tidi* 'my son, what dost thou not know?' but the Sumerian text has: *dumu-mi ana nu-ni-su*, 'my son, what does he not know?' We can say, 'What does my son not know?' instead of 'What dost thou not know?' (contrast SG 157, *ad* § 150). We often use the third person instead of the second or first. A little boy may say, 'Johnnie has tummy-ache' instead of 'I have pains in my stomach.' In the first scene of *King Lear*, Cordelia says: 'What shall Cordelia speak? Love, and be silent!' and Kent says to Lear: 'Be Kent unmannerly, when Lear is mad.' In the second act of Wagner's *Walküre* Wotan says to Brünnhilde: 'Brünnhilde stürme zum Kampf, dem Wilsung kiese sie Sieg' instead of 'Brünnhilde, stürme zum Kampf, dem Wilsung kieso du Sieg.' Later in the same act Siegmund asks Brünnhilde: 'Umfängt Siegmund Sieglinde dort?' to which Brünnhilde replies: 'Sieglinde sieht Siegmund dort nicht.'

We may substitute the third person for the first or second in relative clauses. For Hebrew *ānī Iahyē mēqaddēšō* (Lev. 21: 15; 22: 9, 16) we may say 'I am the Lord which sanctify him' (Revised Version) or 'I am the Lord who sanctifies him' (Polychrome Bible). Similarly we may say for 'Our Father, which art in heaven' (Authorized Version) 'Our Father, who is in heaven.' If the first or second person of the verb is used in connection with a relative pronoun, it is necessary in German to insert the pronoun of the first or second person: 'Unser Vater, der du bist im Himmel.'

In Syriac one may use in a relative clause after a vocative either the second person or the third (see Nöldeke, *Syr. Gr.* § 350 n, o). In Arabic we generally find in this case the third person, e.g. *jū ûjñhā 'lladīna ûmanū* 'O ye who believe,' not *ûmântum*; but it is more usual to say *a-lâsta 'l-âbda 'lladī kûnta* 'art thou not the slave who wast?' instead of *a-lâsta 'l-âbda 'lladī kâna* 'art thou not the slave who was?' (see *WdG* 2. 324 n; 319 c; Reckendorf, § 198; Spitta, § 206 d; Fleischer, *KS* 1. 802; cf. *GK* § 155 m; also Dillmann², p. 466, 1. 3).

We may say 'A new song will I sing Thee, O God, who givest victory' or 'who gives victory.' In Ps. 144. 10 we find co-ordinated to 'Thee' in v. 9: 'who saves His servant from the sword' = Hebrew *Elôhim ūr-haddô asîrâ-lâk . . . hep-pôgê 'l-âbda me-hârb*.¹² In Ps. 104 the Authorized Version has: 'Thou art clothed with honor and majesty, who coverest thyself with light

as with a garment, who stretchest out the heavens like a curtain.' but in the following verses the third person is used instead of the second: 'Who layeth the beams of His chambers in the waters, who maketh the clouds His chariot, who walketh upon the wings of the wind, who maketh His angels spirits, His ministers a flaming fire.' The Polychrome Bible here substitutes the second person (cf. *JHUC*, no. 163, p. 48^b).

There are a great many passages in the Old Testament where we may substitute the second person for third and vice versa; cf., for example, Ps. 106 and 136. For a series of co-ordinated participles, either with or without the article, cf. Ps. 136. 4; 144. 10; 145. 16; 146. 6; 147. 8; also the fragments of the Maccabean psalm scattered through the Book of Amos (4. 12, 13; 5. 8, 9; 9. 5, 6). The portions preserved consist of three triplets with 3 + 3 beats. The last line of the third triplet is lost. It has been replaced by a repetition of the second triplet. For *ə'sî* in the first line of the first triplet (4. 12) we must read the third person (*ja'sî*). We find these co-ordinated participles also in the cuneiform prototypes (*JHUC*, no. 163, p. 54^a) of the Biblical Psalms, e.g. *ASKT* 116. 6, 8, 10 (*CV* xxxv; *ZB* 33; *DB* 1. 169^a, 1. 6). For the Assyrian participles the Sumerian has here the simple roots without any preformatives or afformatives, e.g. *ləm-mumu* = Assyr. *muščáti urkīti* 'she who causes herbage to sprout'; *u-tu dušči-ene* = Assyr. *báničt kalámi* 'she who generates everything.'

The Hebrew parallels cited above help us to understand the substitution of the third person for the second in Sumerian hymns and incantations. In 4 R^c 20, no. 2, l. 7, we find, for example, for the Assyrian version *lāmaš ana māti rēbiča tašši* 'O Sungod, thou hast lifted thy head toward the land' in Sumerian: *babbar kalamáš-ta sagāna-ju mi-nin-il* 'O Sungod, in the land with his head he lifts' (cf. *SFG* 58, n. 5; contrast *SG* 121, n. 2). We may regard this as a relative clause, equivalent to Hebrew *han-nōši bē-rōšō* 'el-ha-'ārq (for the *bē* cf. *nāši bē-rōš* = ἀνθρώπος κεφαλὴν ἔχων in Sir. 11. 13; also *OK* § 119 q and *JBL* 32. 112, n. 19; 113, n. 23).

If we use *Your Excellency* or *Your Lordship*, or similar forms of address, we employ the third person instead of the second. We also prefer the third person to the first in formal invitations and replies. If a letter begins with 'The undersigned,'

or 'An old soldier who,' or 'A poor woman who,' the third person is used instead of the first. In English we say 'you would expect' for the German *man würde erwarten*. In Hebrew one may say 'he [or they] will expect,' although the second person may be used (*GK* § 144 b, d, f, h; *Mic.* 25, n. 17). If we find in Hebrew the third person feminine in cases like *yat-téqr-ló* instead of *yai-jéqr-ló*, we must supply *nassó* 'his soul.' In German a person is now addressed *Sie* 'they'; some punatilious people use this also for *er* 'he' when referring to a person in his presence: instead of saying 'er hat mir soeben gesagt, er müsste morgen abreisen' they will say 'sie haben mir soeben gesagt, sie müssten morgen abreisen' (cf. *BL* 26, n. 1). I have heard men address a young apprentice *du*, an old coachman *Ihr*, and a little boy *du* or *er* (e.g. 'will er wohl!' instead of 'willst du wohl!' sc. 'das sein lassen,' i.e. 'stop that!')

In the eighth and ninth centuries of our era princes and high dignitaries were addressed *Ihr*. In the 17th century it was customary to say *Er* for 'you.' The plural *Sie haben* has been used for *Er hat* in the sense of 'you have' since the end of the 17th century. Schiller's father, who died in 1796, addressed his son in his letters *Er*.¹² In Schiller's *Die Räuber* (1781) Franz addresses his father *Ihr*, while he thou's his son; Karl uses *Sie* in speaking to the Catholic father. For *Er* cf. the opening scenes of Lessing's *Minna von Barnhelm*. In the Bavarian army officers addressed enlisted men *Er* down to 1868. Originally *Er* was preceded by *der Herr*, corresponding to Hebrew *אֲדֹנִי*, and this form of address is still used in certain cases: a waiter may say, 'Wünschen der Herr zu speisen?' In the German army not only privates and non-commissioned officers, but even lieutenants will not say to a captain, 'Haben Sie sonst noch Befehle, Herr Hauptmann?' but 'Haben der Herr Hauptmann sonst noch Befehle?' It is also considered more polite to say 'Gnädige Frau gestatten!' instead of 'Gestatten Sie, gnädige Frau!'

In modern Hebrew it is still good form to use the third person instead of the second. For 'come in!' for example, one says *tabó!* i.e. 'let him come!' A lady will say to a guest at her table: *ış-ħit-li-nu 'el-qallaħtō yl-'ašimá lē-fanħu haħiġi! baħar qali*, lit. 'may he pass me his plate, and I will place before him

a slice of roasted meat'; or if 'óm-ná hañizát çalt' *egl* 'may he taste a slice of roast veal!' for 'Won't you try a slice of roast veal?'" The third person is more formal and more polite than the second. In giving an order to a servant the second person would be used, just as one uses *voi* in speaking to an Italian cabman or porter, but in addressing a gentleman one says *Lei* (lit. 'her'; cf. our 'it can't be me' and the expression 'thee is' used by the Friends instead of 'thou art')¹⁴ or *Ella* 'she' with the third person singular, e.g. *ha Ella avuto nuove di suo fratello?* = 'have you had news of your brother?' lit. 'has she [viz. *vostra signoria*] had news of her brother?' Some writers use the feminine even in the verb, e.g. *quando è Ella arrivata?* = 'when did you arrive?' (addressed to a gentleman).

Also in Spanish the third person is used instead of the second, because 'you' = 'thou' is expressed by *usted* = *vuestra merced* 'Your Grace' (Portuguese *voçê* = *vossa merce*). 'Have you your cane?' is in Spanish *tiene V. su bastón?* lit. 'has Your Grace his cane?' In the Middle Ages *vos* was used instead of *tu*.

In conclusion I wish to emphasize the following points:—

- (a) Sumerian was a tonal language; apparently identical syllables which have entirely different meanings may have been distinguished by tones, as in Chinese or Siamese (cf. *SPG* 19. 6; *AJSL* 19. 205, n. 7; 24. 355; *JAOS* 34. 322, 326).¹⁵
- (b) The three different persons were not distinguished by different tones of the verbal preformatives.
- (c) Nor were they differentiated by the quantity of the vowels of the preformatives.
- (d) The pronouns of the first and second persons may be construed with the third person of the verb.
- (e) Even without a pronoun of the first or second persons, or words like *thy servant* or *my lord*, the third person of the verb may be used for the first or second persons.
- (f) In cases where a vocative seems to be followed by the third person of the verb instead of the second, we may regard the statement after the vocative as a relative clause, at least from our point of view; cf. the Hebrew appositional participles in *Ps.* 104. 2-6 and similar passages.

NOTES

¹ For the abbreviations see vol. 34, p. 425, n. 6.—*SG*, *SGI*, *SS* = Delitzsch, *Sumerische Grammatik*, *Sumer. Glossar*, *Sumer. Sprachlehre*, Leipzig, 1914.—*ZB* = Zimmern, *Babylonische Busspsalmen*, Leipzig, 1885. Cf. *JBL* 36, 75.

² This article, apart from the two introductory paragraphs, is reprinted (with some slight modifications) in *MSL* xx-xxxv.

³ I said 'mit verschiedener Stimmbiegung.' The same expression is used in Meyer's *Grosses Konversations-Lexikon*, 4, 60^o (1903): 'Touakzente, d.h. Stimmbiegungen.' This article also uses the acute and grave accents for indicating the Chinese tones, e.g. *chi* 'to know,' *chi* 'finger,' *chi* 'to be willing,' *chi* 'upright.' In Brockhaus's *Konversations-Lexikon*, 4, 166 (1901), the term *Töne* is employed, and the grave accent is used for one of them: *li* 'plum,' *li* 'pear.'

⁴ For phonetic writing in Sumerian cf. *SGI* 143, l. 13; 150, 1, 2; 190, mud 4; 200, l. 8; 269, l. 2. *SGI* 91-92 (cf. 278) states that *gir* 'dagger' is used incorrectly for *gir* 'foot,' and vice versa. The root *tuk* 'to speak' is often written *tuk* = 'to take' (*SGI* 147, 161; *SG* § 156). *SGI* 77, l. 12 calls the use of *gal* 'great' for *gal* 'to be' 'schlechte Schreibweise' (cf. also 141, l. 10; 237, l. 2; 242, l. 5; 281, last line but one; 284, *maš* 5; 285, *gap*). *SGI* 106, l. 16; 246, l. 1; 264, *šeš* 3, uses the term *Ideogrammverwechselung* (cf. *SG* § 12). In a German rebus (cf. Lagarde, *Mitteilungen*, 4, 364; *BL* 131, n. *) the idea of a cemetery might be expressed by an enclosed space (yard, cf. churchyard, graveyard) and a personification of Peace, because very few Germans know that the first syllable of *Friedhof* 'cemetery' is not the word *Friede* 'peace,' but is connected with *Einfriedigung* 'fence, enclosure.' Both *Friede* and *Einfriedigung* are, of course, derived from the same stem (cf. *AJSL* 22, 203, below; *JBL* 29, 87, l. 5).

⁵ Certain English Orientalists use the acute accent in place of the macron or the circumflex to indicate long vowels. But the grave is not used for the breve. Our use of the grave in poetry corresponds, in some respects, to the Syriac *mōhagjānā* (Nöldeke, *Syr. Gr.* § 52, 5). The acute accent indicates long vowels in Hungarian. The Masoretic punctuation of Hebrew does not distinguish between long and accented vowels; the Hebrew words for 'king,' 'book,' 'ear' should be pronounced *meleχ*, *mešep̄*, *āq̄* (*AJSL* 26, 29, n. II). The vowels of the second syllable in 'בָּקָר' and 'בָּרָךְ' are accented, but not long (read *berāk*, *berāk*). Greek names like Παῦλος appear in Hebrew as פָּאָלָיָס; cf. Albrecht, *Neuhebr. Gr.* (1913) § 7 d; Nöldeke, *Syr. Gr.* p. 34, l. 5. Also the ērē in the imperatives of the verbs לְזַהַב

and in the construct state of nouns in -*ā* (like *šadā* 'field') is not a long ē, but an accented short ē. English-speaking Jews often confound long and short vowels, saying, for example, *sin* for *seen*, and *seen* for *sin*. Cf. also Nöldeke, *Syr. Gr.*² § 42, 47, 48.

² Cf. also 2, 30 of the German edition of Max Müller's *Lectures*; Techmer, *Phonetik*, 1. 70.; Sievers, *Phonetik*, § 602; Sweet, *Elementarbuch des gesprochenen Englisch*, p. 44 (*Tonhöhe*).

³ This does not correspond to our 'tonic accent,' which is generally used for 'syllabic stress'; but the title of Samuel Wells Williams's dictionary (Canton, 1859) was *A Tonic Dictionary of the Chinese Language*.

⁴ The Sumerian ġ is a ܓ = ܓ (SG 71; ASKT 135; CV 6; BA 1. 255). Princee (e.g. JAOS 34. 323; 36. 95) uses ġ for ġ, but ġ is the symbol for ܓ, i.e. our j.

⁵ According to SG § 147 c, *tašōkan* = *ap-gaga* is wrong; but it is just as correct as the free translation of *ḡe-pa* 'let him be conjured' by *lū-tamāt* 'be thou conjured' (see SG 73, *pat* 2; SG § 152 a, c; also § 170, and especially p. 157, *ad* § 150; cf. p. 4, l. 5, and the remarks on the prohibitive in § 158). Also the alleged forms of the first person given in SG § 151 are forms of the third person; *mu-ra-du*, Gudea Cyl. B, 2. 20, does not mean 'I have built for thee,' but 'he [viz. Gudea; cf. l. 7, 12, and 3. 2] has built for thee.'

⁶ For the reading *gik* instead of *gig* see JAOS 32. 12, l. 4; JBL 32. 139, n. 2; OLZ 17. 454.

⁷ Similarly we have *uduk* 'weapon,' originally 'killer'; this is also the primary meaning of the name of the demon Uduk (SG 45). The original connotation of *ugu* 'parent' (SG 43) may be 'raiser,' i.e. 'one who raises [or brings up] a child.' The original form was, it may be supposed, *ugun*. The prototype of Aram. *attānā* 'oven,' Sumer. *udun*, may be derived from *tun*, *dun* 'to dig, excavate' (SG 152). Assyr. *utūnu* 'oven' (SG 45) is synonymous with *tinūru*, Heb. *tannūr*. DB 2. 73^a states that the term *tannūr* is still in use in the Lebanon for a special kind of oven in which the women bake bread. A pit is dug in the earth, and a hollow cylinder of pottery, about two feet in diameter, is let down into it. Cf. also DB 3. 637^a; KB 605 and 270. Sumer. *gir* 'oven,' the prototype of Heb. *gir* (Is. 27. 9) and *kirdjim* (Lev. 11. 35), denotes especially an asphalt-furnace or pitch-pot (cf. KAT² 516; BI. 121; JBL 36. 93).

⁸ If the *ae* in *mae* (later *ps*) was pronounced as a diphthong (cf. p. 28 of Princee's paper cited at the beginning of this article), the pronunciation may have been *mai* (our *my*), but not *mo* (= French *eu* in *meuse* or *Meuse*). Sievers, *Phonetik*²

§ 415, says that the diphthongs in German *Hain*, *Haus* are really *ae* and *eo*, not *ai* and *au*.

¹³ Cf. *Measure for Measure*, 2. 2. 92: 'Your brother is a forfeit of the law,' and Greek *έρωτος νόμος*; *βαράτης πάντες ὀφελόμενος*; *νίκη* *νίκη*, Sophocles, *Phil.* 1086; Lat. *sorti* *destinatus*. The primary meaning of *destinare* is 'to fasten, to bind' (cf. Arab. *rāhāna* = *hābasa*). Assyr. *salpūtu* 'adversity' (= *salputtu*, from *lapātu*; *HW* 384^a) does not correspond to Heb. *sālīf*. We have the stem of Heb. *sālīf* in Assyr. *salpītu* 'wickedness' (*HW* 256^b). The *s* in Hebrew and Arabic (*jásila*) is due to partial assimilation (cf. *JBL* 36, 141, n. 4).

¹⁴ Cf. *JBL* 19, 62, n. 8; *AJSL* 13, 142.

¹⁵ The words *rū'ā* after *me-hārī* and *dayid* before *'abdō* are glosses.

¹⁶ Cf. the articles *Duren* and *Er* in *Brockhaus* (see above, n. 3).

¹⁷ See J. Rosenberg, *Hebr. Conversationsgrammatik*, p. 77, 104. Rosenberg writes *hařiħat* instead of *hařiħat* (corrected on p. 180). Siegfried-Baentsch, on the other hand, wrote *Mordehai* for *Mordeħai*; see *Esra, Nehemia und Ester* (Göttingen, 1901), p. 135-139, 152-175.

¹⁸ *Thee* is used for *thou* in the dialect of West Somerset; also *you* was accusative (and dative) until about the 16th century, the nominative being *ye* (cf. *EB*¹¹ 12, 326^a; *Century Dictionary*, p. 7012^a).

¹⁹ The same view was expressed by Amiaud in 1888; see Weissbach, *Die sumerische Frage* (Leipzig, 1898), p. 104, n. 8; cf. p. 172.

THREE NOTES IN HEBREW LEXICOGRAPHY

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1. PSALMS 75. 9.

כִּי כָּס בֵּיד יְהוָה וַיַּן חַכְרָנָלָכְךָ וַיַּעֲמַד מִזְבֵּחַ אֶת שְׁמְרִיהַ יָמָצָא
שְׁחוֹ בְּלִ רְשָׁעִי אָרַי

The Massoretic reading **וַיַּעֲמַד מִזְבֵּחַ** which is translated into English by 'he poureth out of the same' has been generally considered unsatisfactory, and thus some modern critics, following the Greek and Syriac versions, have suggested the emendation **מִזְבֵּחַ לְהָ**, that is, 'he poureth out from one (cup) into another.' But I need hardly say that this emendation does not render the expression less ambiguous and cumbersome.

I venture, therefore, to offer the following new explanation of the term **כָּס**. We need only slightly to alter the vowel points of the word, reading **כָּסָה** instead of the present **כָּסָה** to see that the Massoretic text is on the whole correct. **מִזְבֵּחַ** is not the demonstrative **זֶה** with the particle **וְ**, but it is rather the substantive **זֶה** with the pronominal suffix **וְ**. The phrase **וַיַּעֲמַד מִזְבֵּחַ** may thus be rendered 'and he poureth out her **כָּס**.' As to the meaning of the term **כָּס**, we may, in the first place, conjecture from its context that it is synonymous with **יַמְזַלֵּחַ**, **חַכְרָנָלָכְךָ**, all of which occur in the same verse, meaning 'wine.' Furthermore, in Arabic, too, this term, invariably written *muzz*, *muzzat*, *mizza*, means 'wine.' It is mentioned in the *Tahzib al-Alfaz* and in the *Lisan al-'Arab* among the words meaning 'wine.' The native Arab lexicographers illustrate this meaning of the term **כָּס** by many citations from ancient poets, for which I may refer to the *Tahzib* just cited.

2. SONG OF SONGS 7. 6.

רָאשֵׁךְ עַלְךְ כְּרֶמֶל וְלָתְךְ רָאשֵׁךְ כְּאַרְגָּמָן כָּלְךְ אֲסֹר בְּרָהְתִּים

How puzzling this verse has proved to all commentators is quite familiar to Biblical students. Both Hebrew and gentile

scholars, ancient and modern, have failed to interpret it, especially the second part. The net result of all their efforts is well summed up by Ehrlich, who writes: 'Hier ist das Schlussglied für mich unübersetzbare.'

Now here, too, the difficulty arises from the misreading of the word **כָּל**, which is treated as if it were the trilateral noun for 'king.' As a matter of fact, the **ל** in this case is not a radical letter, but a pronominal suffix added to the substantive **כָּל** parallel to the **ל** in the preceding **רַאשָׁךְ**. The proper reading is not **מֶלֶךְ**, but **כָּלֶךְ** or **כָּלֶךְ**. Thus, with merely a slight change in the pointing of this one word and without alteration of the Massoretic consonants, this hitherto most obscure verse in the Bible becomes at once clear and intelligible.

In describing his beloved, the lover uses the following three figures of speech: (1) 'thy head upon thee is like Carmel'; (2) 'and the hair of thine head like purple'; (3) 'thy **כָּל** is **אָסָר בְּרָהָטִים**'. All three figures parallel each other, the third conveying the same thought as the preceding. By a gradual process of elimination we may be able to get the meaning of the third part of the verse.

The theme of the passage is the hair of the beloved, for **כָּלֶךְ** corresponds to the preceding word **רַאשָׁה**, which means 'tresses.' The lover sings the praises of her hair, which is **אָסָר**. **אָסָר בְּרָהָטִים** is most commonly used in the sense of binding, but not infrequently it is also used in the sense of tying, as in **וַיַּאֲסַר אֶת כְּרֶבֶתָו וַיַּאֲסַר אֶת בְּכָרְנִיהָם בְּעַנְלָה וַיַּאֲסַר אֶת כְּרֶבֶתָו וַיַּאֲסַר אֶת בְּכָרְנִיהָם בְּעַנְלָה וַיַּאֲסַר אֶת בְּכָרְנִיהָם בְּעַנְלָה**. **וַיַּאֲסַר אֶת בְּכָרְנִיהָם**—**אָסָר לְנֵפֶן עִירָה**—in the last place in the sense of girdling. The verb may therefore be used here in the sense of doing up the hair with something, either for ornament or convenience. The meaning of the word **רָהָטִים** becomes clear. It refers to the ribbons and fillets which a woman employs to do up her hair. Now the term **רָהָטִים** in the sense of 'tresses,' which is usually attributed to it in this passage, likewise does not occur elsewhere in the Bible, as modern commentators have observed (cf. Budde), while **כָּל** is *hapax legomenon*.

But, as a matter of fact, both **כָּל** in the sense of tresses and **רָהָטִים** in the new interpretation I give it, rest on a firm basis. Although none of the senses of the Hebrew root **כָּלֶךְ**, found

elsewhere in the Bible, suggest the sense in which I suppose 'כל' is used in the Song of Songs, namely that of 'tresses,' it might conceivably be that this meaning was derived from the conception of motion implied in the root **כָּלַל**, from which we have the expression **כָּלַל בָּרְנָלִי**, and perhaps also the word **כָּלַל** in the sense of rubbing and stirring, as found in the Mishna. Compare, for example, the word **תַּלְתַּלִּם** which Nöldeke declares to have been derived from the Arabic *tallala*, which is used in the sense of motion. It is also possible that the word **כָּלַל** in the Mishna in the sense of fringes, as in the passage Kelim 28, 7, **חַרְצָן כְּנָן הַפְּלָל**, according to the interpretation of R. Hai Gaon, is closely related to the word.

The Arabic, to be sure, possesses no noun *mall* meaning 'hair,' but there is the inverted term *limmat* 'locks,' which is used by the ancient poet al-'Ijāj quoted by al-Asmāyī in his *Kitāb hulūk al-insān* (ed. A. Haffer). Now the derivation of the word *limmat* remains obscure; for, among the various shades of meaning of the Arabic root, all of which imply arrival and approach, there is none from which it could logically have been evolved in this sense. The explanation given in the *Lisān al-'Arab* seems rather far-fetched. One is therefore tempted to question the indigency of the word in the Arabic language. It is perhaps permitted to suppose that it was borrowed from some other Semitic language, not improbably from the Hebrew itself, and that, in passing from one language to another, the radicals became transposed, as is so often the case.

As regards the word **רְהַתִּים**, the argument rests on a still firmer basis. There seems to be no room for doubt. The word **רְהַת** is found also in Arabic, where it is used in a sense very much akin to that in which I suppose it is used in this verse. See the *Lisān al-'Arab*, s.v. According to Lane, s.v., the *rakāf* is a garment for children made of skin or wool cut into thongs or strips.

We may conclude that in the ancient Semitic language the word **רְהַת** originally has the general sense of a strip of leather or cloth, of a width varying according to its use in each locality. Among the Hebrews the **רְהַת** may have been a narrow strip like a fillet, used both as an ornament and a hair-band.

3. NAHUM 2. 14.

הנני אליך נאם יהוה צבאות והכערתי בעשן רכבה וכפירות
האכל חרב והכורת מארן טרפך ולא שמע עוד
קול מלאככה

The great majority of modern commentators are generally agreed upon accepting the Massoretic text of this verse, subject, however, to a slight emendation. They would regard the **נ** at the end of **מלאככה** as a dittography from the beginning of the next verse.

The commentators have, nevertheless, been slightly troubled as to the proper disposal of **מלאככה**. There is no room at all for a messenger, for the entire last part of this chapter deals with lions and their prey. One of the modern commentators has suggested that we substitute **מהלך** for **מלאככה**, while others declare that this whole hemistich must be placed elsewhere. But the Massoretic text is correct. The word **מלאך** used here is not the word **מלאך** in the usual sense of 'messenger,' but is derived rather from a root **לְאַךְ** whose Arabic equivalent is *laka* 'grind.' The roots *'alaka* and *'olaka* are used in exactly the same sense. The three roots are used synonymously in the sense of grinding some hard object between the teeth, as a horse grinds his teeth upon the bit. It is the sound made by the molar teeth when grinding something hard. There is no doubt that the word **מלאככה** used here is employed in a similar sense to complete the figure of the lion and his prey. Translate: 'the sound of thy grinding.'

BRIEF NOTES

Note on Kathāsaritsāgara 9. 7

At the opening of the second book of the *Kathāsaritsāgara*, in which the story of Udayana is begun, there is a passage that requires emendation, although Speyer has not dealt with it in his critical notes (*Studies about the Kathāsaritsāgara*, p. 154 ff.). On introducing Satānika, the grandfather of Udayana, the author says (turning 9, v. 6 and 7):—

*taṣyām rājā satānikā pāṇḍavānāya nāmabhaव
janamejayaputra 'bhīt peatra rājāḥ parīkṣitāḥ
abhimanyuprapautrasya yasyādipuruso 'rjunaḥ.*

This is translated by Tawney (l. 51), according to the text given above: 'In it [the city of Kausāmbī] dwelt a king named Satānika, sprung from the Pāṇḍava family; he was the son of Janamejaya, and the grandson of king Parīkṣit, who was the great-grandson of Abhimanyu. The first progenitor of his race was Arjuna.'

The apparent omission of two generations between Parīkṣit and Abhimanyu is surprising, and is also in contradistinction with the accounts of the Mahābhārata and the Purāṇas, which make Parīkṣit the son of Abhimanyu (see Pargiter, *The Purāṇa Text of the Dynasties of the Koli Age*, p. 4). Read therefore in the third line *-prapautras tu*, 'and he (Satānika) was the great-grandson of Abhimanyu.' The corruption of the nominative into the genitive is easily explained by the influence of the following *yasya*.

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Name of the so-called deity Za-mal-mal

In the Chicago Syllabary recently published (Luckenbill, *AJSL* 23, 169 ff.), line 220 is read: *ba-a* | sign to be explained | *pi-so-an-nu* | *ia za-mal-mal* *śu-ma*.

¹ Ed. Brockhaus, 1. 97; ml. Durgāprasad and Parab, p. 28 (Bombay, 1889). D's second edition (1903) is not accessible to me.

The name of the patron god of Kish who is identified with In-urta (Nin-IB), called *mār rēstum ša E-kur* in the Hammurabi Code, and later 'the Marduk of battle,' has been read *Za-mā-mā*, and, as above, *Za-mal-mal*. The last word in the line of the Syllabary, namely, *šu-ma*, however, is to be understood as meaning that the sign in the name which has been read *mā* and *mal*, is here to be read *ba*. For the same expression cf. line 288 of the Yale Syllabary (Clay, *Miscellaneous Inscriptions*, 53: 288), which reads: *ur-ta* | sign to be explained | *u-ra-šu* | *ša Nin-IB lu-ma*, which means that the sign *IB* or *urašu* in *Nin-IB* is to be read *ur-ta*.¹ The complete name, however, is to be read *Nin-urta* or *(N)in-urta*. In late times, according to a well-established law, the *r* passes into *š*, and the name is reproduced in Aramaic characters **נִינְמָרְתָּא**, which represents *In-urta* < *In-urta* < *In-maria* < *Nin-maria* or perhaps *Nin-Mar-Tu*.

With the reading *Za-bā-bā* before us, the name of the god of Ekron, Baal Zebūb, immediately suggests itself for comparison. The usual explanation of this name, i.e. 'lord of flies,' a Zeus *τερμός*, such as was worshiped at Elis in Greece, has never seemed appropriate for the oracle god which was consulted by Ahazia, king of Israel. Perhaps later we will find more evidence of a deity in Western Asia named *Zabūb* or *Zahāb*, whose name was reproduced in Babylonia by the scribes as *Za-bā-bā*.

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Babylonian *niš* 'oath' in West-Semitic

One point in the fragmentary and difficult ending of the Hadad inscription from Zenjirli is cleared up by reading **נִנְשָׁנָה** in lines 28 and 29 as equal to the Babylonian *niš* 'oath.' The repeated **נִנְשָׁנָה יְאֵנָה** will then mean 'he shall speak (take) his oath,' the final **ה** being the pronominal suffix (not a radical, which would be **נ**, or the emphatic ending, which does not occur in this inscription). In line 28-29 read: 'Your brother shall take his oath: Has he destroyed, or stolen . . .' (**ה** not *Hafel*, which is unknown in **נִנְשָׁנָה**, but interrogative particle). Then

¹ See also line 51 of the Yale Syllabary. That *urta* is the reading only of *IB*, was not stated in *Miscellaneous Inscriptions*.

further on: 'He shall take his oath: If [וְיְהוָה יְהוָה, n.b. the proper particles of swearing] I have set these words in a presumptuous mouth [read וְ rather than יְ, the facsimile speaking for the former] . . .' (Can the following verbs be interpreted as imperatives: 'Then stand fixed, my eye, be terrified[!], my ear [reading 'בְּנֵי']'?) Evidently the subject of the text is brought before some kind of judicial ordeal. If יָהָה is to be interpreted as 'oath,' it is a Babylonian importation, and may reflect light upon the meaning of the Babylonian term in the contracts, where its meaning is variously explained.

I would suggest that possibly 'יְהָה יְהוָה' of Ex. 17. 15 is to be translated, not 'Yahwe is my banner,' but 'Yahwe is my oath,' i.e. 'I swear by Yahwe.' The following obscure verse evidently gives Yahwe's oath of destruction against the Amalekites. In this case the word has been taken over from the Babylonian with a Samek instead of a Sin (possibly through South-Arabic influence?).

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On the Reading of the Date-formula of the Fourth Year of Gimil-Sin

The date-formula, commemorating the fourth year of Gimil-Sin, king of Ur, has universally been transcribed by: *mu⁴Gimil⁴ Sin lugal Uri⁴ -ma-ge bād mar-tu mu-ri-iq Ti-id-ni-im* mu-dū (or, *mu-rū*). (See Myhrman, *BE* 3, part 1, p. 42; Kugler, *Sternkunde und Sterndienst*, vol. 2, part 1, p. 172; Huber, *Die Personennamen in den Keilschrifturkunden aus der Zeit der Könige von Ur und Nisir*, p. 33, etc.) Striking is here the Semitic name of the wall, which has been translated by Kugler: 'Schutzwehr gegen Tidnum.' It seems somewhat forced to translate 'Bulwark against Tidnum,' but it could be translated by 'bulwark of Tidnum.' This would imply that Tidnum is either a personal name, or, what seems more probable in case we acquiesce in the above transcription, a special district of Urak. But Tidnum as a geographical name, so far as I can ascertain, is nowhere mentioned. In view of the fact that we meet in this date-formula with the Semitic word *marik* I would propose to read instead of *Ti-id-ni-im*, *al-ii-im* and connect the

preceding *ti* with *murik*, i.e. *mu-ri-ik-ti a-li-im*. The phonetic reading of the Sumerian phonetic values for a Semitic word is not uncommon at that age, particularly in proper names. It could then be translated either by: 'City-extension,' if *muriktu* is taken as the participle of *araku* 2^o, with fem. termination (for *murriktu*), or 'bulwark of the city.' Note also that the omission of *ti* in *RTC* 428, R. 7, in this case is not a mistake of the scribe, but fully justified.

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'Emperor'-worship in Babylonia—a Reply

Without trespassing too much upon the Journal's valuable space, it seems desirable to point out, with reference to what Professor Barton has written (*JAOS* 37, 162-163), that while he appreciates my aim in my article on 'emperor'-worship, he accuses me of overlooking evidence which would overthrow my whole thesis. Only three points in reply are necessary: first, *JAOS* 36, 363, note 12, will disprove the accusation of overlooking important evidence; secondly, a comparison of the article itself with what Professor Barton writes in his last two paragraphs will show conclusively that he has made no point which has not already been made in my article, where the possibilities of other interpretations have been carefully noted; finally, it can hardly be considered biased to attempt to discover whether material can be interpreted in more ways than one. In my opinion, evidence proving 'emperor'-worship in Babylonia may be forthcoming, but it has not yet appeared.

SAMUEL A. B. MERRER

Western Theological Seminary, Chicago

The Assyrian Veterinary Physician

The existence of the veterinary *surgeon* among the Babylonians is known from Hammurabi's codex. The activity of the veterinary *physician* is revealed in Rm 362 of the Kuyounjik texts.

The history of the veterinary medicine and surgery is almost a history of horse treatment. Greek, Latin, Anglo-Saxon, and

Middle Low German veterinary texts have been published, and in every case disorders of horses' feet occupy the first place. Colics of the horse is the principal internal ailment recorded by the ancients, and this has been treated since Assyrian times.

A large percentage of the badly mixed contents of *CT* 14 shows a characteristic arrangement of three columns. A single name of a plant, often accompanied by species determination through color, origin, or the like, appears in each line of the first column; the second column tells in what sickness it is useful; the third column advises the manner of application.

Rm 362, on plate 41 of *CT* 14, contains parts of 13 lines of 5 sections. The first section consists of 5 lines. Of the first column, only the species determination of the last two plants is preserved; in each case it reads *eqli 'arvensis*. The first line of the second column is slightly mutilated and can be restored to read *zum qī-iz libbi ūa murnīzqī* 'plant for abdominal cutting aches of the horse.' This means that the plant named in the first column is a remedy useful in treating colics of the horse. The next 4 lines repeat: 'remedy for the same.' The third, fourth, and fifth lines of the third column have lost because of mutilation the sign *HT*. Each reads: *taħaśal īna kuruni tħirri ana libbi* 'contunde in vino, ungue ad abdomen.'

Cataplasma have been used throughout the centuries for treatment of colics of the horse. Rm 362 presents the oldest evidence hitherto found.

FELIX VON OEPKE

New York City

NOTES OF THE SOCIETY

The annual meeting of the Middle West Branch of the Society will be held in Cincinnati on February 22d, 1918. The Hebrew Union College has extended an invitation, and the local committee of arrangements, Messrs. Morgenstern, Grossman, Kohler, and Philipson, is already making provision for the entertainment of the members. The program has not been completed, but papers have been announced by Messrs. Breasted, Buttenwieser, Byrne, Fullerton, Kohler, Lyhyer, Morgenstern, Olmstead, Tolman, Waterman, and Wolfson, and others are under consideration. Members desiring to present communications are requested to inform the secretary of the Branch, A. T. Olmstead, Urbana, Illinois.

The annual meeting of the Society will take place at New Haven on Tuesday, Wednesday, and Thursday of Easter Week, April 2d, 3d, and 4th, 1918.

NOTES OF OTHER SOCIETIES

A joint meeting of the Archaeological Institute, the American Philological Association, the Society of Biblical Literature and Exegesis, the American Historical Association, and the American Anthropological Association was held in Philadelphia at the University of Pennsylvania, December 26th to 29th, 1917. The Society of Biblical Literature held its sessions of the first day at Dropsie College. Several of the joint sessions were devoted to symposiums and topics of interest to Oriental students. On the 27th the following papers were presented, each one being followed by the remarks of an appointed opener of the discussion: "The Cosmopolitanism of the Religion of Tarsus and the Origin of Mithra," by A. L. Frothingham; "Oriental Impe-

rialism," by A. T. Olmstead (opener, Morris Jastrow, Jr.); "Greek Imperialism," by W. S. Ferguson (opener, W. N. Bates); "Roman Imperialism," by G. W. Botsford (opener, S. B. Platner); "The Decay of Nationalism under the Roman Empire," by Clifford Moore (opener, F. F. Abbott). On the 29th the Historical Association held a conference on Far Eastern History, with the following papers: "The Mid-Victorian Attitude of Foreigners in China," by F. W. Williams; "American Scholarship in Chinese History," by K. S. Latourette; "Twenty Years of Party Politics in Japan, 1897-1917," by W. W. McLaren; "The History of Naturalization Legislation in the United States, with Special Reference to Chinese and Japanese Immigration," by S. L. Gulick. There was also a subscription dinner conference for members of the Historical Association interested in Far Eastern History. At a joint session of the Archaeological Institute and the Society of Biblical Literature several papers on the archaeology of the Near East were presented. The meetings were thus particularly characterized by attention to Oriental questions.

The Archaeological Institute elected as president James C. Egbert, and as additional vice-presidents A. T. Clay, H. R. Fairclough, H. N. Fowler, Frank Springer; the other officers were re-elected.

The Society of Biblical Literature elected the following officers: president, J. A. Montgomery; vice-president, E. J. Goodspeed; secretary, H. J. Cadbury; corresponding secretary, M. L. Margolis; treasurer, George Dahl.

The governing board of the American School of Oriental Research in Jerusalem met in connection with the above meetings. It was felt that this was a propitious time for taking steps toward raising an endowment for the School and for making other provisions for its usefulness as soon as work can begin again in Jerusalem. A gift of \$50,000 was announced from Mrs. James B. Nies, of Brooklyn, for the construction of the first building on the School's property. Consul Glazebrook, of Jerusalem, reported on the condition of the property of the School and gave an interesting account of conditions in Jerusalem, which he left last May. Professors Torrey, Clay, and Ropes were re-elected, respectively, chairman, secretary, and treasurer of the Managing Committee.

We quote the following from the Literary Supplement of the *London Times*:-

The two oldest European organizations for the advancement of Oriental learning—the Société Asiatique, which began its activities in 1822, and the Royal Asiatic Society, which came into existence a year later—have concluded an agreement in the last few days for close and practical co-operation. It is felt that the most effective preparation for a wider federation of Allied Orientalists is for the two older societies to constitute a nucleus which may be a *point d'appui* for similar organizations. One of the objects of the scheme is that of replacing by a better, more speedy, and less cumbersome organization the old Orientalist Congresses, which met triennially in various European capitals. The last of these congresses was held in Athens in 1912, and the one in prospect before the war for 1915 was to assemble in London.

The Hyderabad Archaeological Society announces the institution of the 'Pinhey Memorial Gold Medal,' to be awarded triennially for the best work on Deccan archaeology or history. Theses for the first competition, which is open to scholars in any part of the world, will be received up to the end of October, 1918.

Those interested in the science of phonetics will be glad to learn of the formation in New York, during the past summer, of the Phonetic Society, whose object is, as implied in its name, 'the advancement of the organized knowledge of the sounds of human speech in general, and of the sounds and combinations of sounds which characterize the different languages of the world.' While necessarily local and limited in its activities at the start, this society looks forward to a wider membership and larger field of usefulness. Its first president is Dr. Charles P. G. Scott; its secretary is Robert Morris Pierce (143 West 47th Street, New York City), who will supply additional information on request.

PERSONALIA

The Rev. JAMES HOPE MOULTON, Professor of Hellenistic Greek and Indo-European Philology in the University of Manchester, died, at the age of 53, after the wrecking of his vessel in the Mediterranean by an enemy submarine on April 4th, 1917, from several days' exposure on the sea. He was distinguished in the field of Hellenistic grammar, particularly for his *Grammar of New Testament Greek*, and for his Iranian studies, among which may be named his Hibbert Lectures on *Zoroastrianism*. At his death he was returning from a journey to India, where he lectured before the Parsi community, which has since published the lectures. Probably the last of his learned communications was his report on the decipherment of the Hittite bilingual texts made by Hrozny and his associates and generally inaccessible to the English-speaking world because of the war. This appeared in the *Expository Times* for December, 1916. An appreciation of Professor Moulton is given by his colleague Professor George Milligan in the *Expository Times* for June, 1917.

The Hon. JOHN W. FOSTER, LL.D., a former minister to China and one time Secretary of State, died in Washington on November 15th. He was born in 1836. He distinguished himself in diplomatic negotiations with and in behalf of the Chinese government, and was the author of *American Diplomacy in the Orient* (1902). He was lecturer in international law in Columbian University, Washington, D. C.

The Marquis CHARLES JEAN MELCHIOR de Vogüé, born October 18th, 1829, died in Paris on November 10th, 1917. Appreciations of this distinguished archaeologist are given by S. Reinach in *Revue Archéologique*, 1916, p. 429-447, and by Père Lagrange in *Revue Biblique*, 1917, p. 5. A bibliography of his writings is contained in the *Florilegium . . . à Melchior de Vogüé*, ed. G. Maspero, Paris, 1909.

HENRY BARCLAY SWEETE, D.D., Regius Professor of Divinity in Cambridge University, died last May, in his 83d year. His

great contribution to Oriental scholarship lies in his edition of the Greek Old Testament and the accompanying volume of Introduction.

JOHN GWYN, D.D., Regius Professor of Divinity in the University of Dublin, is dead, in his 91st year (see the *Guardian* for April 12th). He was the discoverer and editor of several valuable Syriac manuscripts of the New Testament.

Dr. TRUMAN MICHELSON, of the Bureau of American Ethnology, has been appointed Professor of Ethnology at George Washington University. He will retain his position as ethnologist in the Bureau. He spent a profitable season of field work in the summer and autumn among the Sank, Fox, and Potawatomi Indians.

LIST OF MEMBERS

The number placed after the address indicates the year of election.
† designates members deceased during the past year.

HONORARY MEMBERS

Dr. RAMKRISHNA GOPAL BHANDARKAR, C.I.E., Deccan College, Poona, India. 1887.

Prof. EDOUARD CHAVANNE, 1 Rue des Ecoles, Fontenay aux Roses, Seine, France. 1917.

Prof. CHISLES CLERMONT-GARNIER, 1 Avenue de l'Alma, Paris. 1909.

Prof. T. W. RHTS DAVIDS, Cotterswick, Chipstead, Surrey, England. 1907.

Prof. BERNHOLD DELBRÜCK, University of Jena, Germany. 1875.

Prof. FRIEDRICH DELITZSCH, University of Berlin, Germany. 1893.

Prof. ADOLPH EISNER, Berlin-Siegels-Dahlem, Germany, Peter Lennéstr. 72. 1903.

Prof. RICHARD GAMKE, University of Tübingen, Germany. (Büssinger Str. 14.) 1902.

Prof. KARL F. GELDNER, University of Marburg, Germany. 1905.

Prof. JONAT GÖLDZIHER, VII Holló-Utca 4, Budapest, Hungary. 1906.

GEORGE A. GRIMSON, C.I.E., D.Litt., I.C.S. (retired), Rathfarnham, Camberley, Surrey, England. Corporate Member, 1899; Hon., 1905.

Prof. IGNAZIO GUINI, University of Rome, Italy. (Via Botteghe Oscure 24.) 1893.

Prof. HERMANN JACOB, University of Bonn, 59 Niebuhrstrasse, Bonn, Germany. 1909.

Prof. HISTORIK KERK, 45 Willem Barentz-Straat, Utrecht, Netherlands. 1893.

Prof. LEONARD W. KIRK, British Museum, London, England. 1917.

Prof. SYLVAIN LÉVI, Collège de France, Paris. (9 Rue Guy-de-la-Brosse, Paris, V^e.) 1917.

Prof. EDUARD MEYER, University of Berlin, Germany. (Gross-Lichterfelde-West, Mommagstr. 7.) 1908.

Prof. THEOPH. NÖLDEKE, University of Strassburg, Germany. (Kaiser-Friedrichstr. 32.) 1878.

Prof. HERMANN OLDENBERG, University of Göttingen, Germany. (27/29 Nikolaiusberger Weg.) 1910.

Prof. EDUARD SACHAU, University of Berlin, Germany. (Wormserstr. 12, W.) 1887.

Prof. ARCHIBALD H. SAYCE, University of Oxford, England. 1893.

EMILE SÉGÉR, Membre de l'Institut de France, 18 Rue François I^e, Paris, France. 1908.

Prof. C. SNOUCK HURMANS, University of Leiden, Netherlands. (Witte Singel 84a.) 1914.

Prof. JUANUS WELLAHUSER, University of Göttingen, Germany. (Weberstrasse 18a.) 1902.

Prof. ERNST WINDISCH, University of Leipzig, Germany. (Universitätsstrasse 15.) 1890. [Total: 24]

CORPORATE MEMBERS

Names marked with * are those of life members.

Rev. DR. JUSTIN EDWARDS ABBOTT, 120 Hobart Ave., Summit, N. J. 1900.
 MRS. JUSTIN E. ABBOTT, 120 Hobart Ave., Summit, N. J. 1912.
 DR. CYRUS ADLER, 2041 North Broad St., Philadelphia, Pa. 1884.
 DR. WILLIAM FOXWELL ALBRIGHT, Johns Hopkins University, Baltimore, Md. 1915.
 DR. THOMAS GEORGE ALLEN, 5547 Drexel Ave., Chicago, Ill. 1917.
 DR. OSWALD T. ALLEN, 26 Alexander Hall, Princeton Theological Seminary, Princeton, N. J. 1916.
 Prof. MASAHARU ANESAKI, Imperial University, Tokyo, Japan. 1914.
 SHIGEMI ARAKI, 102 West 123d St., New York. 1915.
 Prof. J. C. ARCHER, 571 Orange St., New Haven, Conn. 1916.
 Prof. WILLIAM R. ASHOLD (Andover Theol. Seminary), 25 Kirkland St., Cambridge, Mass. 1893.
 Prof. KANICHI ARAKAWA, Yale University Library, New Haven, Conn. 1904.
 Q. M. Sgt. CHARLES CHANET BAKER, 1125 Arbor Drive, San Diego, Cal. 1916.
 Hon. SIMON E. BALDWIN, LL.D., 44 Wall St., New Haven, Conn. 1898.
 DR. HUBERT BANNING, 17 East 128th St., New York. 1915.
 LEMONT BARBOUR, 140 West End Ave., New York, N. Y. 1917.
 Prof. LEROY CARR BABBIT, Trinity College, Hartford, Conn. 1903.
 Prof. GEORGE A. BATTON, Bryn Mawr College, Bryn Mawr, Pa. 1898.
 MTC. DANIEL M. BATES, 51 Brattle St., Cambridge, Mass. 1912.
 Prof. L. W. BATTEN (General Theol. Seminary), 418 West 20th St., New York. 1894.
 Prof. HARLAN P. BEACH (Yale Univ.), 346 Willow St., New Haven, Conn. 1898.
 Miss ETHEL BEERS, 3414 South Paulina St., Chicago, Ill. 1916.
 *SHRIPAD K. BELVALKAR, Deccan College, Poona, via Bombay, India. 1914.
 Miss EPPIE BENHORN, 420 West 121st St., New York, N. Y. 1915.
 Prof. HAROLD H. BENNETT, Princeton University, Princeton, N. J. 1900.
 E. BEN YEHUAD, 473 Central Park West, New York, N. Y. 1916.
 Prof. C. THEODORE BENZE, D.D. (Mt. Airy Theol. Seminary), 7304 Boyer St., Mt. Airy, Pa. 1916.
 PIERRE A. BERNARD, 662 West End Ave., New York, N. Y. 1914.
 Prof. GEORGE R. BERRY, Colgate University, Hamilton, N. Y. 1907.
 Prof. JULIUS A. BEWER, Union Theological Seminary, Broadway and 120th St., New York, N. Y. 1907.
 DR. WILLIAM STEPHEN BISHOP, 60 Beacon St., Boston, Mass. 1894.
 CARL W. BISHOP, University of Pennsylvania Museum, Philadelphia, Pa. 1917.

Dr. FRANK RINGGOLD BLAKE (Johns Hopkins Univ.), 7 Carroll Road, Windsor Hills, Baltimore, Md. 1900.

Dr. FREDERICK J. BLISS, Syrian Protestant College, Beirut, Syria. 1898.

Prof. CARL AUGUST BLOMBERG (Augustana College and Theol. Seminary), 825 36th St., Rock Island, Ill. 1900.

Prof. LEONARD BLOOMFIELD, 804 W. Oregon St., Urbana, Ill. 1917.

Prof. MAURICE BLOOMFIELD, Johns Hopkins University, Baltimore, Md. 1891.

PAUL P. BLOOMHARDT, Lutherville, Md. 1916.

Dr. ALFRED BONHOMME, Le Rivage près Chambéry, Switzerland. 1897.

Dr. GEORGE M. BOLLING, 93 N. Ohio Ave., Columbus, Ohio. 1898.

GUSTAV VON BLOCHWITZ, 87 Middle Divinity Hall, University of Chicago, Chicago, Ill. 1917.

Prof. JAMES HENRY BREASTED, University of Chicago, Chicago, Ill. 1891.

Rev. CHARLES D. BROOKSHIRE, Lock Box 56, Alma, Mich. 1917.

Rev. Dr. GEORGE WILLIAM BROWN, Jabbulpoor, C.P., India. 1909.

Dr. WILLIAM NORMAN BROWN, 227 South 41st St., Philadelphia, Pa. 1916.

Prof. CARL DARLING BUCK, University of Chicago, Chicago, Ill. 1892.

LUCILLE S. BULL, 5344 University Ave., Chicago, Ill. 1917.

ALEXANDER H. BULLOCK, State Mutual Building, Worcester, Mass. 1910.

CHARLES DANA BURRAGE, 85 Ames Building, Boston, Mass. 1909.

Dr. ROMAIN BUTIN, Catholic University of America, Washington, D. C. 1915.

Prof. HOWARD CROSSLEY BUTLER, Princeton University, Princeton, N. J. 1909.

Prof. MOSES BUTTENWIESER (Hebrew Union College), 257 Loraine Ave., Cincinnati, Ohio. 1917.

Dr. ETHELINE H. BYRNE, 240 Lake Lawn Place, Madison, Wis. 1917.

Prof. HENRY J. CARMICHAEL, Haverford College, Haverford, Pa. 1914.

Rev. JOHN CAMPBELL, Kingsbridge, New York, N. Y. 1896.

Prof. ALBERT J. CARMY, University of Pennsylvania, Philadelphia, Pa. 1916.

J. DUDLEY CARROLL, 1032 Forest Ave., Memphis, Tenn. 1915.

Prof. FRASERLIN CARTER, LL.D., Williamstown, Mass. 1873.

Dr. PAUL CAUSUS, Care of Open Court, La Salle, Ill. 1897.

Dr. I. M. CARANOWICK, U. S. National Museum, Washington, D. C. 1893.

Rev. JOHN S. CHANDLER, Sunnyside, Rayapettah, Madras, Southern India. 1899.

Miss EVA CHANNING, Hemenway Chambers, Boston, Mass. 1883.

Dr. F. D. CHESTER, The Bristol, Boston, Mass. 1891.

Dr. EDWARD CHIERS (Univ. of Pennsylvania), 5340 Baltimore Ave., Philadelphia, Pa. 1915.

HWANG CHUNG-HUEI, Hotel Nottingham, Boston, Mass. 1915.

ARTHUR H. CLARK, Caxton Building, Cleveland, Ohio. 1917.

Prof. WALTER E. CLARK, 24 North Hall, University of Chicago, Chicago, Ill. 1906.

Prof. ALBERT T. CLAY (Yale Univ.), 401 Humphrey St., New Haven, Conn. 1907.

*ALEXANDER SMITH COCHRAN, 820 5th Ave., New York, N. Y. 1903.
 Rabbi SAMUEL S. COHEN, 4100 Washington Boulevard, Chicago, Ill. 1917.
 *GEORGE WETMORE COLLES, 62 Fort Greene Place, Brooklyn, N. Y. 1882.
 Prof. HERMANN COLLITE (Johns Hopkins University), 1027 Calvert St.,
 Baltimore, Md. 1887.
 Prof. C. EVERETT CONANT, Univ. of Chattanooga, Chattanooga, Tenn.
 1905.
 Dr. ARANDA K. COOMARASWAMY, Museum of Fine Arts, Boston, Mass.
 1917.
 EDWIN SANFORD CRANDON, 36 Bowdoin St., Cambridge, Mass. 1917.
 Rev. WILLIAM MEERIAM CRANE, Richmond, Mass. 1902.
 FRANCIS A. CUNNINGHAM, 508 W. Maple Ave., Merchantville, N. J. 1910.
 Prof. JOHN D. DAVIS, Princeton Theological Seminary, Princeton, N. J.
 1888.
 Hon. ALEXANDER DEL MAR, 5 Nassau St., New York, N. Y. 1917.
 Prof. IRWIN H. DE LONG, Theological Seminary of the Reformed Church,
 Lancaster, Pa. 1916.
 Prof. ALFRED L. P. DENNIS, University of Wisconsin, Madison, Wis. 1900.
 JAMES T. DENNIS, Woodbrook, Md. 1900.
 GOTTHARD DEUTSCHE, 3600 Wilson Ave., Cincinnati, Ohio. 1917.
 Mrs. FRANCIS W. DICKINS, 2015 Columbia Road, Washington, D. C. 1911.
 Dr. VICOJI DUNSHAW, Mahabulnagar, Hyderabad, India. 1915.
 Rev. D. STUART DODGE, 99 John St., New York, N. Y. 1867.
 LOUIS A. DOLE, Urbana, Ohio. 1916.
 LEON DOMINIAN, American Geographical Society, 156th St. and Broadway,
 New York, N. Y. 1916.
 Rev. A. T. DORF, 1635 N. Washtenaw Ave., Chicago, Ill. 1916.
 Rev. WALTER DRUM, S.J., Woodstock College, Woodstock, Md. 1916.
 Rev. WM. HASKELL DU BOIS, University of the South, Sewanee, Tenn.
 1912.
 Dr. GEORGE S. DUNCAN, 2900 7th St., N. E., Washington, D. C. 1917.
 Prof. FRANKLIN EDGERTON, University of Pennsylvania, Philadelphia, Pa.
 1910.
 WILLIAM F. EDGERTON, 3600 Allendale St., Washington, D. C. 1917.
 Mrs. ARTHUR C. EDWARDS, 209 West 91st St., New York, N. Y. 1915.
 GRANVILLE D. EDWARDS, 811 College Ave., Columbia, Mo. 1917.
 Prof. FREDERICK G. C. EISLER, Garrett Biblical Institute, Evanston, Ill.
 1901.
 ALBERT W. ELLIS, 40 Central St., Boston, Mass. 1917.
 WILLIAM T. ELLIS, Swarthmore, Pa. 1912.
 Dr. AARON EHRER, Johns Hopkins University, Baltimore, Md. 1902.
 Prof. HENRY LANE ENO, Princeton Univ., Princeton, N. J. 1916.
 Prof. C. P. PAGNANI (Union Theol. Seminary), 606 W. 122d St., New York,
 N. Y. 1901.
 Prof. EDWIN WHITFIELD FAY (Univ. of Texas), 200 West 24th St., Austin,
 Texas. 1888.
 Dr. JOHN P. FENLON, Catholic Univ. of America, Washington, D. C. 1915.
 Dr. JOHN C. FERGUSON, 91 Arlington St., Newton, Mass. 1900.

Dr. HENRY C. FISKE, District National Bank Building, Washington, D. C. 1912.

CLARENCE S. FISHER, University of Pennsylvania, Philadelphia, Pa. 1914.

Rev. Dr. FONCK, Instituto Biblico Pontificio, Via del Archelito, Roma, Italia. 1913.

Rev. Dr. HODGKIN E. W. FOSSHOKE, General Theological Seminary, Chelsea Square, New York, N. Y. 1917.

Prof. JAS. EVERETT FRAME (Union Theol. Seminary), Broadway and 120th St., New York, N. Y. 1892.

Prof. JOHN FETTER, 2620 Durant Ave., Berkeley, Cal. 1917.

Prof. LESLIE ELMER FULLER, Garrett Biblical Institute, Evanston, Ill. 1916.

Prof. KEMPER FULLERTON, Oberlin Theological Seminary, Oberlin, Ohio. 1916.

Dr. WM. HENRY FURNESS, 3d, 1906 Sansom St., Philadelphia, Pa. 1918.

Miss MAUD H. GARNER, Ormiston Hall, Appleton, Wis. 1915.

Dr. CARL GAENSELLE, 3117 Cedar St., Milwaukee, Wis. 1917.

ALEXANDER B. GALVY, 2219 California St., Washington, D. C. 1917.

ROBERT GARRETT, Continental Building, Baltimore, Md. 1903.

Rev. FRANK GAYNOR, St. Francis House, Cambridge, Mass. 1917.

Dr. HENRY SYRIS GRIMM, So. Philadelphia High School, Broad and Jackson Sts., Philadelphia, Pa. 1916.

EDGARD A. GELLOT, 290 Broadway, New York, N. Y. 1911.

Rev. P. GEORGELIN, S.M., S.T.L., Marist College, Brookland, D. C. 1916.

Miss ALICE GETTY, 75 ave. des Champs Elysees, Paris, France. 1915.

Prof. BASIL LARMEAU GILDERSON (Johns Hopkins University), 1002 N. Calvert St., Baltimore, Md. 1858.

Rev. Dr. A. H. GOODER, Bridgton, Me. 1917.

Prof. ALEXANDER H. GORDON, Presbyterian College, Montreal, Canada. 1912.

Prof. RICHARD J. H. GOTTHEIL, Columbia University, New York, N. Y. 1895.

KINGDON GOULD, 145 Broadway, New York, N. Y. 1914.

Prof. ELIJAH GRANT, Haverford College, Haverford, Pa. 1907.

Dr. LOUIS H. GRAY, 25 Brimmer St., Boston, Mass. 1897.

Mrs. LOUIS H. GRAY, 25 Brimmer St., Boston, Mass. 1907.

Miss BELLE DE COSTA GREENE, 33 East 36th St., New York, N. Y. 1915.

Miss ETALIENE M. GRICE, Care of Babylonian Collection, Yale University, New Haven, Conn. 1915.

Miss LUCIA C. GRAEME GRIEVE, 50 Neck Ave., Ocean Grove, N. J. 1894.

Prof. LOUIS GROSSMAN (Hebrew Union College), 2212 Park Ave., Cincinnati, Ohio. 1900.

¹Dr. GEORGE C. O. HAAS, 518 W. 140th St., New York, N. Y. 1903.

Miss LUCILLE HAESLER, 100 Morningside Drive, New York, N. Y. 1909.

Mrs. IDA M. HANCHETT, Care of Omaha Public Library, Omaha, Nebr. 1912.

Prof. PAUL HAUPT (Johns Hopkins Univ.), 215 Longwood Road, Roland Park, Baltimore, Md. 1853.

EDWARD A. HENRY, Box 217, University of Chicago, Chicago, Ill. 1917.
PHILIP S. HENRY, 1402 Massachusetts Ave., Washington, D. C. 1914.
Prof. HERMANN V. HILFRECHT, Leopoldstr. 8, München, Germany. 1897.
Prof. WILLIAM J. HINKE (Auburn Theol. Seminary), 156 North St.,
Auburn, N. Y. 1907.
Prof. ERIL G. HIRSCH, 3612 Grand Boulevard, Chicago, Ill. 1917.
Prof. FRIEDRICH HIRSH (Columbia Univ.), 401 West 118th St., New York,
N. Y. 1903.
PHILIP K. HITT (Columbia University), 2929 Broadway, New York, N. Y.
1915.
*Dr. A. F. RUDOLF HOERNLE, 8 Northmoor Road, Oxford, England. 1893.
*Prof. E. WASHBURN HOPKINS (Yale Univ.), 239 Lawrence St., New
Haven, Conn. 1881.
Dr. STANLEY K. HORNECK, University of Wisconsin, Madison, Wis. 1917.
Prof. JACOB HOSCHWALD, Dropaia College, Broad and York Sts., Phila-
delphia, Pa. 1914.
HENRY R. HOWLAND, Natural Science Building, Buffalo, N. Y. 1907.
Dr. EDWARD H. HUMK, Changsha, Hunan, China. 1909.
Prof. ROBERT ERNEST HUME (Union Theol. Seminary), 606 W. 122d St.,
New York, N. Y. 1914.
*Dr. ARCHIBALD M. HUNTINGTON, 15 West 81st St., New York, N. Y. 1912.
SOLOMON T. HURWITZ, 217 East 69th St., New York, N. Y. 1912.
Prof. ISAAC HUSK, 408 S. 9th St., Philadelphia, Pa. 1916.
Prof. MARY INDA HUSK, Mt. Holyoke College, South Hadley, Mass.
1913.
*JAMES HAZEN HYDE, 18 rue Adolphe Yvon, Paris, France. 1909.
Prof. HENRY HYATTENAT (Catholic Univ. of America), 3405 12th St., N. E.
(Brookland), Washington, D. C. 1889.
Prof. A. V. WILLIAMS JACKSON, Columbia University, New York, N. Y.
1885.
Mrs. A. V. WILLIAMS JACKSON, Care of Columbia University, New York,
N. Y. 1912.
Prof. MORRIS JASTROW, JR. (Univ. of Pennsylvania), 248 South 23d St.,
Philadelphia, Pa. 1886.
Rev. HENRY F. JENKS, Canton Corner, Mass. 1874.
Prof. JAMES RICHARD JEWETT, Harvard University, Cambridge, Mass.
1887.
FRANK EDWARD JOHNSON, 3038 N St., N. W., Washington, D. C. 1916.
Rev. Dr. C. E. KLEISER, Lyon Station, Pa. 1912.
Prof. ARTHUR BERRIERALD KEITH, University of Edinburgh, Edinburgh,
Scotland. 1908.
Prof. MAXIMILIAN L. KELLNER, Episcopal Theological School, Cambridge,
Mass. 1886.
Dr. FRIEDRICK T. KELLY, 2019 Monroe St., Madison, Wis. 1917.
Prof. JAMES A. KELSO, Western Theological Seminary, Pittsburgh, Pa.
1915.
Prof. ELIAS H. KENDRICK, Wellesley College, Wellesley, Mass. 1896.

Prof. CHARLES FOSTER KEST (Yale Univ.), 415 Humphrey St., New Haven, Conn. 1890.

Prof. ROLAND G. KEST, University of Pennsylvania, Philadelphia, Pa. 1910.

LEO C. KEST, Easton, Md. 1916.

Prof. GEORGE L. KITCHIN (Harvard Univ.), 9 Hilliard St., Cambridge, Mass. 1899.

Dr. K. KOHLER (Hebrew Union College), 3016 Stanton Ave., Cincinnati, Ohio. 1917.

GEORGE S. KUNKEL, 30 Divinity School, Cambridge, Mass. 1917.

WALTER S. KUPFER, 171 Madison Ave., New York, N. Y. 1913.

Rev. Dr. M. G. KYLE, 1132 Afford St., Frankford, Philadelphia, Pa. 1909.

Prof. GOTTHARD LAMMETHORN, Box 212, Hebron, N. Dak. 1917.

*Prof. CHARLES ROCKWELL LANMAN (Harvard Univ.), 9 Farrar St., Cambridge, Mass. 1876.

Prof. KENNETH S. LATOCETTE, Denison University, Granville, Ohio. 1917.

Dr. BRITHOLD LAUTER, Field Museum of Natural History, Chicago, Ill. 1900.

Rabbi MORRIS S. LAZARON, 1712 Linden Ave., Baltimore, Md. 1917.

Rev. Dr. FREDERICK LENT, 195 Livingston St., New Haven, Conn. 1915.

T. Y. LIOU, Chinese Consulate, 18 Broadway, New York, N. Y. 1916.

Dr. GREGOR D. LEVI, 5000 Grand Boulevard, Chicago, Ill. 1917.

Dr. FELIX A. LEVY, 561 Melrose St., Chicago, Ill. 1917.

Rev. H. LINTFIELD, Hebrew Union College, Cincinnati, Ohio. 1912.

Prof. ERNST LITTMAN, Hainholzweg 44, Göttingen, Germany. 1912.

Dr. STEPHEN H. LUCE, University of Pa. Museum, Philadelphia, Pa. 1916.

Prof. DANIEL D. LOCKENBULL, University of Chicago, Chicago, Ill. 1912.

Dr. HENRY P. LUCE, 4314 Sansom St., Philadelphia, Pa. 1916.

Prof. ALBERT HOWE LYMAN (Univ. of Illinois), 1008 W. California St., Urbana, Ill. 1917.

*BENJAMIN SMITH LYMAN, 708 Locust St., Philadelphia, Pa. 1871.

Prof. DAVID GORDON LYON, Harvard University Semitic Museum, Cambridge, Mass. 1902.

ALBERT MORTON LYTHROD, Metropolitan Museum of Art, New York, N. Y. 1899.

FREDERICK MCGORMICK (Asiatic Institute), 27 West 67th St., New York, N. Y. 1917.

Prof. J. P. McCARTY, 255 Fort Washington Ave., New York, N. Y. 1915.

Prof. DUNCAN R. MACDONALD, Hartford Theological Seminary, Hartford, Conn. 1891.

Prof. HERBERT W. MASOUN, 70 Kirkland St., Cambridge, Mass. 1887.

WALTER A. MAIER, 70 Toptiff St., Dorchester, Mass. 1917.

Rabbi LOUIS L. MANN, 757 Orange St., New Haven, Conn. 1917.

Prof. MAX L. MARZOIS (Dropsie College), 6501 Wayne Ave., Philadelphia, Pa. 1890.

Prof. ALLAN MASQUARD, Princeton University, Princeton, N. J. 1885.

JOHN MARTIN, North Adams, Mass. 1917.
Rev. Dr. JOHN A. MAYNARD, 175 9th Ave., New York, N. Y. 1917.
Prof. THEOPHILE J. MEIER (Milikin Univ.), 285 N. Fairview Ave., Decatur, Ill. 1917.
Prof. SAMUEL A. B. MERCER (Western Theol. Seminary), 2738 Washington Boulevard, Chicago, Ill. 1912.
Rev. FREDERIC C. MEREDITH, 32 Kita-kuruwa Cho, Maebashi, Jochu, Japan. 1914.
Mrs. EUGENE MEYER, Seven Springs Farm, Mt. Kisco, N. Y. 1916.
MARTIN A. MEYER, 3108 Jackson St., San Francisco, Cal. 1906.
Dr. TRUMAN MICHELSON, Bureau of American Ethnology, Washington, D. C. 1899.
Mrs. HELEN LOVELL MILLION, Hardin College, Mexico, Mo. 1892.
Prof. LAWRENCE H. MILLIS, 218 Illey Road, Oxford, England. 1881.
Prof. J. A. MONTGOMERY (Univ. of Pennsylvania), 6506 Greene St., Germantown, Philadelphia, Pa. 1903.
BENJAMIN BURKE MOORE, 109 East 38th St., New York, N. Y. 1914.
Prof. GEORGE F. MOORE (Harvard Univ.), 3 Divinity Ave., Cambridge, Mass. 1887.
*Mrs. MARY H. MOORE, 3 Divinity Ave., Cambridge, Mass. 1902.
Dr. RILEY D. MOORE, Div. of Physical Anthropology, U. S. National Museum, Washington, D. C. 1916.
Prof. JULIAN MORGENSTERN (Hebrew Union College), 863 Hutchins Ave., Cincinnati, Ohio. 1915.
Prof. EDWARD S. MORSE, Salem, Mass. 1894.
Rev. HANS K. MOUTON, Jefferson, Wis. 1906.
Prof. W. MAX MUELLER (Univ. of Pennsylvania), 4325 Sansom St., Philadelphia, Pa. 1903.
Mrs. ALBERT H. MUNSELL, 65 Middlesex Road, Chestnut Hill, Mass. 1909.
Dr. WILLIAM MURRAY-ARMOLT, Public Library, Boston, Mass. 1887.
Rev. Dr. WILLIAM M. NERNEY, 477 Main St., Orange, N. J. 1916.
EDWARD THOMPSON NEWELL, Box 331, Madison Square P. O., New York, N. Y. 1914.
Rev. Dr. JAMES B. NIES, Hotel St. George, 51 Clark St., Brooklyn, N. Y. 1906.
*Mrs. JAMES B. NIES, Hotel St. George, 51 Clark St., Brooklyn, N. Y. 1916.
Ven. Archdeacon WILLIAM E. NIES, Unicus Bank, Geneva, Switzerland. 1908.
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Prof. HANNES OETTEL (Yale Univ.), 2 Phelps Hall, New Haven, Conn. 1890.
Dr. CHARLES J. OGDEN, 628 West 114th St., New York, N. Y. 1906.
Miss ELLEN S. OGDEN, Hopkins Hall, Burlington, Vt. 1893.
Prof. SAMUEL G. OLIPHANT, Grove City College, Grove City, Pa. 1906.

Prof. ALBERT TENNEY OLMIERAD (Univ. of Illinois), 901 S. Besse Ave., Urbana, Ill. 1902.

Prof. PAUL OLTRAMARE (Univ. of Geneva), Ave. de Bosquets, Servette, Genève, Switzerland. 1904.

ROBERT M. OLYPHANT, 160 Madison Ave., New York, N. Y. 1861.

Prof. LEWIS B. PATON, Hartford Theological Seminary, Hartford, Conn. 1894.

Dr. CHARLES PEABODY, 197 Brattle St., Cambridge, Mass. 1892.

Prof. GEORGE A. PECKHAM, Hiram College, Hiram, Ohio. 1912.

Prof. ISAAK J. PEITZ, Syracuse University, Syracuse, N. Y. 1894.

Prof. EDWARD DELLYAN PERRY (Columbia Univ.), 542 West 114th St., New York, N. Y. 1879.

Rev. Dr. JOHN P. PETERS, 225 West 99th St., New York, N. Y. 1882.

Prof. WALTER PETERSEN, Bethany College, Lindsborg, Kan. 1909.

Hon. WILLIAM PHILLIPS, Woolley, Woolley Lane, Washington, D. C. 1917.

T. RAMAKRISHNA PILLAI, Thottakkadu House, Madras, India. 1913.

PAUL POPENK, 511 Eleventh St., N. W., Washington, D. C. 1914.

Prof. WILLIAM POPPER, University of California, Berkeley, Cal. 1897.

Prof. IMA M. PRICE, University of Chicago, Chicago, Ill. 1887.

Dr. JULIUS J. PRIOR, 495 Palmerston Boulevard, Toronto, Ont., Canada. 1917.

Prof. JOHN DUNLEAVY PRINCE (Columbia Univ.), Sterlington, Rockland Co., N. Y. 1888.

Rev. FRANCIS J. PURTELL, S.T.L., Overbrook Seminary, Philadelphia, Pa. 1916.

Rev. Dr. CHARLES LYNN PLATT, 801 Jackson St., Gary, Ill. 1917.

Dr. GEORGE PAYNE QUACKENBOS, Colonial Heights, Tuckahoe, N. Y. 1904.

E. N. RABINOWITZ, 125 Airyquith St., Baltimore, Md. 1916.

Dr. CAROLINE L. RANSOM, Metropolitan Museum of Art, 5th Ave. and 82d St., New York, N. Y. 1912.

G. A. REICHLINO, 466 Nostrand Ave., Brooklyn, N. Y. 1912.

Dr. JOSEPH REINER, Dropsie College, Broad and York Sts., Philadelphia, Pa. 1913.

Prof. GEORGE ANDREW REINER, Museum of Fine Arts, Boston, Mass. 1891.

Rev. Dr. PHILIP M. RHINELANDER, Church House, 12th and Walnut Sts., Philadelphia, Pa. 1908.

ERNEST C. RICHARDSON, Library of Princeton University, Princeton, N. J. 1900.

Prof. GEORGE H. RICHARDSON, Peru, Ind. 1917.

J. NELSON ROBERTSON, 294 Avenue Road, Toronto, Canada. 1913.

Rev. CHARLES WELLINGTON ROBINSON, Haverford, Pa. 1916.

Prof. GEORGE LIVINGSTON ROBINSON (McCormick Theol. Seminary), 2312 N. Halsted St., Chicago, Ill. 1892.

Prof. JAMES HARDY ROSES (Harvard Univ.), 13 Follen St., Cambridge, Mass. 1893.

Dr. WILLIAM ROSENAU, Johns Hopkins University, Baltimore, Md. 1897.
Dr. JOSEPH G. ROSENBLATTEN, 1704 Walnut St., Philadelphia, Pa. 1917.
Miss ADALIAH RUDOLPH, 417 West 129th St., New York, N. Y. 1894.
ELIJAH RUSSELL, Woolman House, Swarthmore, Pa. 1916.
P. D. SAKLAVALA, 324 4th Ave., New York, N. Y. 1915.
Mrs. EDWARD E. SALISBURY, 237 Church St., New Haven, Conn. 1906.
Rev. Dr. FRANK K. SANDERS, 25 Madison Ave., New York, N. Y. 1897.
Mrs. A. H. SAUNDERS, 552 Riverside Drive, New York, N. Y. 1915.
Rev. Dr. HENRY SCHLEIFER, 19 Southampton St., Chestnut Hill, Philadelphia, Pa. 1916.
Dr. ISRAEL SCHAPIRO, Library of Congress, Washington, D. C. 1914.
Dr. JOELAN F. SCHELTEMA, Box 998, Yale Station, New Haven, Conn. 1906.
Prof. NATHANIEL SCHMIDT, Cornell University, Ithaca, N. Y. 1894.
WILFRED H. SCHOFF, Commercial Museum, Philadelphia, Pa. 1912.
Prof. H. SCHUMACHER, Catholic University of America, Washington, D. C. 1916.
Dr. GILBERT CAMPBELL SCOTT, University of Missouri, Columbia, Mo. 1906.
Dr. CHARLES P. G. SCOTT, 49 Arthur St., Yonkers, N. Y. 1895.
*Mrs. SAMUEL BRYAN SCOTT (*née Morris*), 124 Highland Ave., Chestnut Hill, Philadelphia, Pa. 1903.
Dr. MOSES SEIDEL, 122 Aisquith St., Baltimore, Md. 1917.
Rev. Dr. WILLIAM G. SEIPLE, 125 Tsuchidai-machi, Sendai, Japan. 1902.
O. R. SELLERS, 126 S. Divinity Hall, University of Chicago, Chicago, Ill. 1917.
Dr. HENRY R. SHARMAN, Tyngs, Mass. 1917.
Prof. CHARLES N. SHEPPARD (General Theol. Seminary), 9 Chelsea Square, New York, N. Y. 1907.
CHARLES C. SHERMAN, 614 Riverside Drive, New York, N. Y. 1904.
*JOHN H. SLATTERY, 14bis rue Montaigne, Paris, France. 1902.
Major C. C. SMITH, Fourth Cavalry, Ft. Leavenworth, Kan. 1907.
Prof. HENRY PREACHER SMITH (Union Theol. Seminary), Broadway and 120th St., New York, N. Y. 1877.
Prof. JOHN M. P. SMITH, University of Chicago, Chicago, Ill. 1906.
Rev. JOSEPH E. SMYTH, Ellicott City, Md. 1916.
ELIZ BANNISTER SOLKE, Care of H. S. King & Co., 9 Pall Mall, London, England. 1911.
Prof. EDWARD H. SPEDDING, Johns Hopkins University, Baltimore, Md. 1884.
Prof. MARCUS SPRAGUING, University of Chicago, Chicago, Ill. 1912.
Rev. Dr. JAMES D. STEELE, 15 Grove Terrace, Passaic, N. J. 1892.
REUBEN STEINBACH, 114 S. Chester St., Baltimore, Md. 1916.
Rev. ANGUS PHELPS STOKES, D.D., Woolbridge Hall, Yale Station, New Haven, Conn. 1900.
Hon. MAYME SULERBERGER, 1503 Girard Ave., Philadelphia, Pa. 1885.
Prof. GREGORY SVARZBUR, Jr., Augsburg Seminary, Minneapolis, Minn. 1907.
Rev. HENRY SWIFT, Plymouth, Conn. 1914.

WALTER T. SWINCLE, Bureau of Plant Industry, Washington, D. C. 1916.
 Rabbi SIDNEY TIDWELL, 461 Elmwood Ave., Providence, R. I. 1916.
 Miss MARGARET THOMAS, 20 Gloucester St., Boston, Mass. 1915.
 Miss FRANCIS THOMPSON, 311 Main St., Worcester, Mass. 1906.
 Prof. HENRY A. TODD (Columbia Univ.), 824 West End Ave., New York, N. Y. 1885.
 Prof. HERBERT CUSHING TOLMAN, Vanderbilt University, Nashville, Tenn. 1917.
 *Prof. CHARLES C. TOSSEY, Yale University, New Haven, Conn. 1891.
 Prof. CRAWFORD H. TOT (Harvard Univ.), 7 Lowell St., Cambridge, Mass. 1872.
 Rev. SIDNEY N. USHER, St. Bartholomew's Church, 44th St. & Madison Ave., N. Y. 1909.
 Rev. Dr. FREDERICK AUGUSTUS VANDERBURGH (Columbia Univ.), 55 Washington Sq., New York, N. Y. 1905.
 ADDISON VAN NAME (Yale Univ.), 121 High St., New Haven, Conn. 1863.
 Dr. ARTHUR A. VASCHALDE, Catholic Univ. of America, Washington, D. C. 1915.
 Miss CORNELIA WARREN, Cedar Hill, Waltham, Mass. 1894.
 Prof. WILLIAM F. WARREN (Boston Univ.), 131 Davis Ave., Brookline, Mass. 1877.
 Rev. SAMUEL W. WARREN, 2937 Perry Ave., New York, N. Y. 1917.
 Prof. LEONOT WATERSMAN, Univ. of Michigan, Ann Arbor, Mich. 1912.
 Prof. J. E. WARREN, 1667 Cambridge St., Cambridge, Mass. 1894.
 Prof. JAMES IVESON WESTENHAGER, 30 Concord Ave., Cambridge, Mass. 1903.
 ARTHUR J. WESTERMAYER, 100 Lenox Road, Brooklyn, N. Y. 1912.
 Pres. BENJAMIN ING WHEELER, University of California, Berkeley, Cal. 1885.
 JOHN G. WHITS, Williamson Building, Cleveland, Ohio. 1912.
 *Miss MARGARET DWIGHT WHITNEY, 227 Church St., New Haven, Conn. 1903.
 HERBERT L. WILLETT, 6119 Woodlawn Ave., Chicago, Ill. 1917.
 Hon. E. T. WILLIAMS, Department of State, Washington, D. C. 1901.
 Prof. FREDERICK WELLS WILLIAMS (Yale Univ.), 155 Whitney Ave., New Haven, Conn. 1895.
 Prof. TALCOTT WILLIAMS, Columbia University, New York, N. Y. 1884.
 Rev. Dr. WILLIAM COPLET WINSLOW, 625 Beacon St., Boston, Mass. 1885.
 Rev. Dr. STEPHEN S. WISE, 23 West 90th St., New York, N. Y. 1894.
 Prof. JOHN E. WISHEART, Xenia, Ohio. 1911.
 HENRY B. WITTON, 290 Hess St., South, Hamilton, Ontario. 1885.
 Dr. LOUIS B. WOLFFSON, 1113 W. Dayton St., Madison, Wis. 1904.
 Dr. HENRY A. WOLFGANG, 25 Divinity Hall, Cambridge, Mass. 1917.
 Prof. LEVING F. WOOD, Smith College, Northampton, Mass. 1905.
 Prof. WILLIAM H. WOOD, 1600 Minnehaha St., St. Paul, Minn. 1917.
 Prof. JAMES H. WOODS (Harvard Univ.), 179 Brattle St., Cambridge, Mass. 1900.

Miss MARGUERITE WOODWARD, U. S. National Museum, Washington, D. C. 1917.
 Prof. WILLIAM H. WORRELL (Hartford Seminary Foundation), 133 Whitney St., Hartford, Conn. 1910.
 Prof. JESSE ERWIN WIESEN (Univ. of Missouri), 1104 Hudson Ave., Columbia, Mo. 1917.
 Rev. Dr. RODGER K. YERKES (Philadelphia Divinity School), 2437 Woodland Ave., Philadelphia, Pa. 1918.
 Dr. S. C. YLVISAKER, Luther College, Decorah, Ia. 1913.
 Rev. Dr. ABRAHAM YOHANNAN, Columbia University, New York, N. Y. 1894.
 Rev. ROBERT ZIMMERMAN, S. J., St. Xavier's College, C眷ickshank Road, Bombay, India. 1911. {Total: 248}

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BOSTON, MASS.: American Academy of Arts and Sciences.
 BROOKLYN, N. Y.: Theosophical Society.
 CHICAGO, ILL.: Field Museum of Natural History.
 Hibbard Egyptian Library.
 NEW YORK: Carnegie Foundation for the Advancement of Teaching.
 PHILADELPHIA, PA.: American Philosophical Society.
 Free Museum of Science and Art, Univ. of Penn.
 WASHINGTON, D. C.: Archaeological Institute of America.
 WORCESTER, MASS.: American Antiquarian Society.

HIBOPE

AUSTRIA, VIENNA: Kaiserliche Akademie der Wissenschaften.
 K. u. K. Direction der K. u. K. Hofbibliothek.
 (Josephplatz 1.)
 Anthropologische Gesellschaft.
 Geographische Gesellschaft.

PRAGUE: Königlich Böhmischa Gesellschaft der Wissenschaften.

DENMARK, ICELAND, EYKJAVIK: University Library.

FRANCE, PARIS: Société Asiatique. (Rue de Seine, Palais de l'Institut.)
 Bibliothèque Nationale.
 Musée Guimet. (Avenue du Trocadéro.)
 Académie des Inscriptions et Belles-Lettres.
 Ecole des Langues Orientales Vivantes. (Rue de Lille,
 2.)

FRANCE, PARIS: Ecole Française d'extrême Orient. (35, rue Bonaparte.)
 Ministère de l'Instruction Publique.

GERMANY, BERLIN: Königlich Preussische Akademie der Wissenschaften.
 Königliche Bibliothek.
 Seminar für Orientalische-Sprachen. (Am Zeughaus 1.)

DARMSTADT: Grossherzogliche Hofbibliothek.

GÖTTINGEN: Königliche Gesellschaft der Wissenschaften.

HALLE: Bibliothek der Deutschen Morgenländischen Gesellschaft. (Friedrichstrasse 50.)
 Naturwissenschaftlicher Verein für Sachsen und Thüringen.

KIEL: Universitäts-Bibliothek.

LEIPZIG: Königlich Sächsische Gesellschaft der Wissenschaften.

MÜNICH: Königlich Bayerische Akademie der Wissenschaften.
 Königliche Hof- und Staatsbibliothek.

TÜRINGEN: Library of the University.

ENGLAND, LONDON: Royal Asiatic Society of Great Britain and Ireland. (22 Albemarle St., W.)
 Library of the India Office. (Whitehall, S. W.)
 Society of Biblical Archaeology. (37 Great Russell St., Bloomsbury, W. C.)
 Philological Society. (Care of Dr. P. J. Furnivall, 3 St. George's Square, Primrose Hill, N. W.)
 E. J. W. Gibb Memorial. (46 Great Russell St.)
 Palestine Exploration Fund. (2 Hindle St., Manchester Square.)

ITALY, BOLOGNA: Reale Accademia delle Scienze dell' Istituto di Bologna.

FLORENCE: Società Asiatica Italiana.

ROMA: Reale Accademia dei Lincei.
 Istituto Biblico Pontificio.

NETHERLANDS, AMSTERDAM: Koninklijke Akademie van Wetenschappen.
 Vereeniging "Koloniaal Instituut."

LEIDEN: Curatorium of the University.

THE HAGUE: Koninklijk Instituut voor Taal-, Land-, en Volkenkunde van Nederlandsch Indië.

RUSSIA, FINLAND, HELSINKI: Société Finno-ougrienne.

PETROGRAD: Imperatorskaja Akademija Nauk.
 Archeologijii Institut.

SWEDEN, UPPSALA: Humanistiska Vetenskaps-Samfundet.

ASIA

CHINA, SHANGHAI: China Branch of the Royal Asiatic Society.

TONKIN: Ecole Française d'extrême Orient (Rue de Coton), Hanoi.

INDIA, ALLAHABAD: Allahabad Public Library.

BOMBAY: Bombay Branch of the Royal Asiatic Society.
The Anthropological Society. (Town Hall.)

BENARES: Benares Sanskrit College, "The Pandit."

CALCUTTA: The Asiatic Society of Bengal. (57 Park St.)
The Buddhist Text Society. (88 Jauh Bazar St.)
Sanskrit College.

DELHI: Secretary to the Government of India, Department of Education.

LAHORE: Library, University of the Punjab.

MADRAS: Oriental Manuscripts Library.
Presidency College.

SIMLA: Office of the Director General of Archaeology. (Bermore, Simla, Punjab.)
Secretary to the Government of India, Department of Education, Simla.

SIAM, BANGKOK: Siam Society.
Vagirajana National Library.

CYANOS, COLOMBO: Ceylon Branch of the Royal Asiatic Society.

JAPAN, TOKYO: The Asiatic Society of Japan.

JAVA, BATAVIA: Bataviaansch Genootschap van Kunsten en Wetenschappen.

KOREA, SEOUL: Korea Branch of the Royal Asiatic Society.

NEW ZEALAND, NEW PLYMOUTH: The Polynesian Society.

PHILIPPINE ISLANDS, MANILA: The Ethnological Survey.
Philippine Library.

SYRIA, JERUSALEM: The American School. (Care U. S. Consul.)

SIBERIA, VLADIVOSTOK: Oriental Institute.

HAWAII, HONOLULU: Bernice Pauahi Bishop Museum.

AFRICA

Egypt, CAIRO: The Khedivial Library.

JOURNALS AND OTHER PUBLICATIONS

The Indian Antiquary (Education Society's Press, Bombay, India).

Révue de l'Histoire des Religions (care of M. Jean Roville, 166 Rue M. E. Leroux, 25 rue Bonaparte, Paris, France).

Archives orientales (care of Prof. J. A. Lindell, Upsala, Sweden).

Orientalische Bibliographie (care of Prof. Lucian Scherman, Herzogstrasse 8, Munich, Bavaria).

Transactions of the American Philological Association (care of Prof. C. P. Bill, Western Reserve University, Cleveland, O.).

Le Monde Oriental (care of Prof. K. F. Johansson, Upsala, Sweden).

Panini Office, Bhuvaneswari, Assam, (Allahabad) Bahadurganj (India).

Siddhanta Dipika Office, Madras, N. C. (India).

Ceylon Antiquary and Literary Register (Colombo, Ceylon).

Revue Biblique (90 Rue Bonaparte, Paris, France).

Al-Machriq (Université St. Joseph, Beirut, Syria).
 Revue de l'Orient Chrétien (care of Prof. Nau, Rue Littré 10, Paris, France).
 Leipziger Semitistische Studien (J. C. Hinrichs, Leipzig, Germany).
 Indian Text Series (care of J. Murray, Albemarle St., London, England).
 Bibliotheca Buddhica (Petrograd, Russia).
 Zeitschrift für die alttestamentliche Wissenschaft (care of Prof. D. Karl Marti, Marienstr. 35, Bern, Switzerland).
 Beiträge zur Assyriologie und semitischen Sprachwissenschaft (J. C. Hinrichs'sche Buchhandlung, Leipzig, Germany).
 Wiener Zeitschrift für die Kunde des Morgenlandes (care of Alfred Hölder, Rothenthurnstr. 15, Vienna, Austria).
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